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BATH UNCUT

Writing the unofficial history of the University of Bath.

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FUTURECAST

How discoveries made at Bath today could shape our world in 50 years.

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INTERVIEW WITH A ZOMBIE

Keeping a RAG tradition alive.

THE MAGAZINE FOR ALUMNI AND FRIENDS OF THE UNIVERSITY OF BATH ISSUE 24



It's our birthday!

Birthdays are a time for reflection. A time to acknowledge your achievements and to appreciate the people who are important to you.

They're also a time for aspiration. A time to set new goals and new challenges. But, most importantly, birthdays are a time to stuff yourself with cake!

We couldn't post everyone a slice of our 50th anniversary birthday cake (far too messy) so we thought we'd do the next best thing and send you this lovely, cake-themed BA2, expertly iced by our Alumni Fund Manager, Victoria.

We know it looks good, but don't be tempted to lick it!



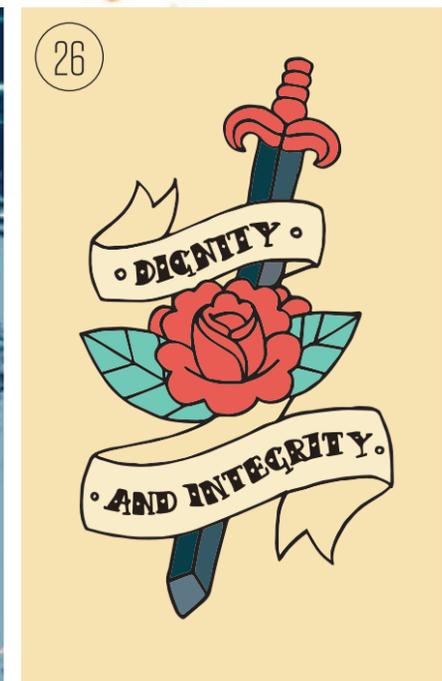
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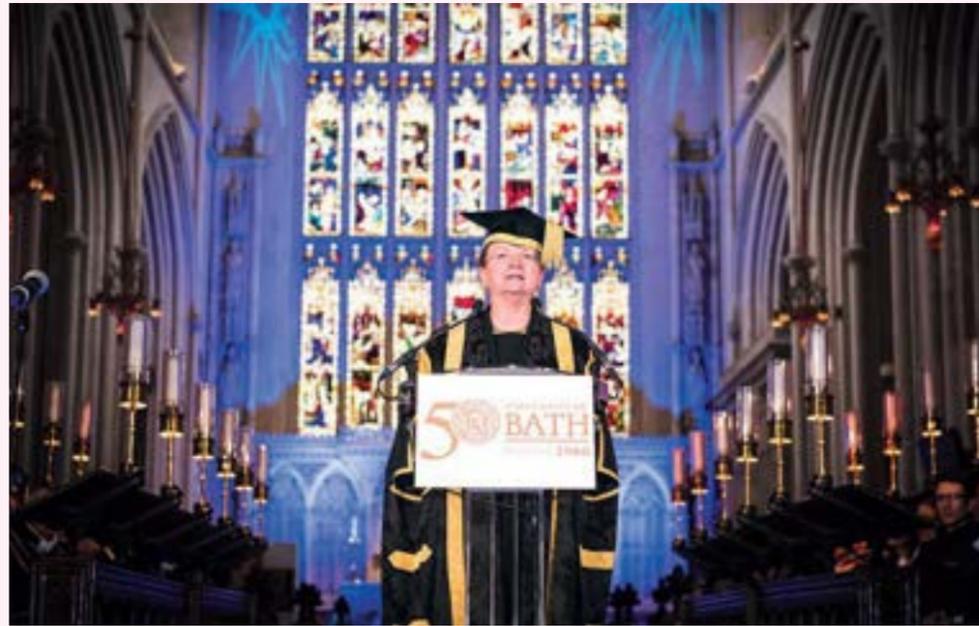
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**Abbey Birthday
to us**
Celebrating
our golden
anniversary.

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View from 4West

Celebrating 50 remarkable years



My tenure as Vice-Chancellor has coincided with one of the most exciting and eventful periods in higher education.

I doubt that the University's first students in 1966 would have foreseen the growth in student numbers, the increasing internationalisation of our universities or the introduction of tuition fees. I feel sure that the coming years will herald more significant change.

Our University has changed enormously since I arrived in 2001. Opening our magnificent Sports Training Village facilities, moving our summer graduation ceremonies to Bath Abbey, and giving our students and community The Edge – a creative centre to be proud of – are just three highlights.

This year we have extended our reach into the City of Bath (18 Manvers Street), and into London (83 Pall Mall) – moves which I'm sure will further enhance our reputation as one of the UK's leading universities.

Investment in our infrastructure and our people has enabled us to achieve a great deal. Our research and teaching has gained national and international recognition, we have won the Queen's Anniversary Prize twice and been named the *Sunday Times* University of the Year.

"I am proud of everything the University has achieved"

Most recently, of course, I have been delighted to see donations towards our first-ever fundraising campaign passing the £50 million mark. This will transform our ability to contribute to solving the problems of our age.

This year we are celebrating the 50th anniversary of the granting of our Royal Charter by Her Majesty The Queen. I am proud of everything the University of Bath has achieved in its first half century – I hope that you are too. This special edition of BA2 celebrates those years and, in the spirit of looking further, predicts what might be round the corner.

Professor Dame Glynis Breakwell DBE DL FAcSS
President and Vice-Chancellor

Date for your diary

06

May 2017
University of Bath Festival and Alumni Reunion

Join us for the climax of our 50th anniversary celebrations. We're transforming campus into a festival site, where you can explore the best of Bath through science demos, sports challenges, quizzes, talks and hands-on workshops. There will be something for all ages, so bring your family and friends for what promises to be an unforgettable day.

Then, from 4pm 'til late, catch up with former classmates and alumni from across the decades at our Alumni Reunion, which is set to be our biggest ever. Tickets are £10, and include food, music and exceptional company. Book at 50years.bath.ac.uk



If you have changed contact details recently, please let us know. Email alumni@bath.ac.uk to make sure you don't miss out on invitations.



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Our ducks take flight



Alumni, students and staff are going quackers for our 50th anniversary rubber ducks.

Bluey and Goldie had the holiday of a lifetime with alumnus **Mark Phillips** (BSc Electrical & Electronic Engineering 1986) and his RAG friends from University on their US tour last summer. Read more about RAG, and Mark, on page 22 – don't forget you can get your hands on your very own duck from the Students' Union shop or at www.bathunigifts.co.uk

In hot water

We stumbled on a quintessential Bath moment with the 1977 Graduation Ball photo, which appeared on page 27 of the last issue.

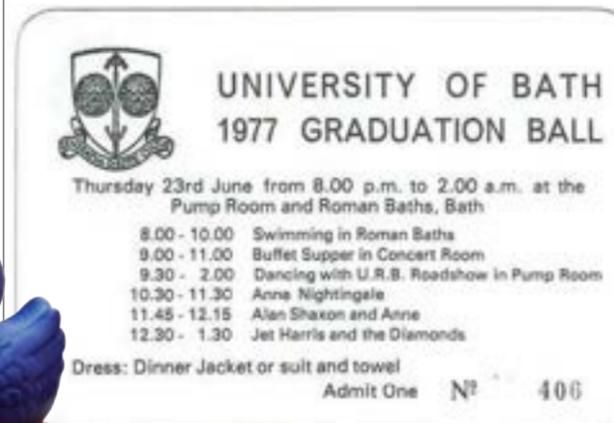
"I was there with my girlfriend, who became my fiancée the following month and has now been my wife for 37 years. After the bathing and the dinner, we remember being entertained by a magician. It was amusing at the time for the men to see all the ladies arrive with expensive 'hair-dos' only to see the effect after a short time in the water. Great times remembered with much affection."

"Kathy and I also remember the Magician's trick at the Graduation Ball of sealing a piece of paper in an envelope, then asking one of the audience to select

a car they would like (Rolls Royce), a lady to select the colour (white) and a gentleman to see how much change they had in their pocket (I think it was 5p). He then asked someone in the audience to open the envelope, which contained a receipt from the Rolls Royce dealer for the deposit of 5p on a white car. I am not sure why that has remained in the mind for nearly 40 years, when much of my degree course has gone missing from the memory!"

Paul Cunningham
(BSc Aeronautical Engineering 1977)

Thank you to everyone who contacted us to say "I was there!" and sent in their own photos from the evening. We particularly enjoyed seeing this ticket from **Gill Macadam-Smith** (BSc Applied Biology 1977).



All new BA2

"I must congratulate you for the new look and the rebranding. It is eye-catching and very well laid out. The articles in the magazine are very well chosen and catch the reader's attention."

Lam Hoo Ong
(MBA Executive 1989)

Lots of you wrote to us about our relaunched BA2 – thank you for your comments and feedback. We hope you enjoy our special 50th birthday issue just as much.

A few alumni asked where Class Notes had gone. We've moved them on to our website www.bath.ac.uk/alumni, so if you'd like to update us with your news, please email alumni@bath.ac.uk

What are the chances?

Back in August we did a good deed via Facebook when we helped reunite **Cate Mackay** (BA MLES French & German 2010) with her graduation pictures. A fellow graduate found a camera memory card whilst walking in Cornwall and emailed the photos to us. **Edward Fry** (MEng Electronic & Communication Engineering 2010) then recognised the photo on Facebook. Thanks to everyone involved!

ON PARADE

Highlights from the University of Bath's first 50 years

Campus

Do you remember the first time?

We had the UK's first 24-hour library in 1996. But how many of our other firsts did you know?

- Our first graduate in 1966 was David Hancocks (BSc Architecture & Building Engineering). Meet him on page 34.
- Our first on campus student residences opened in 1970.
- University Radio Bath broadcast for the first time in 1973. URB was launched by BBC DJ Annie Nightingale.
- The Duke of Kent was the first member of the Royal Family to visit campus. He viewed research into radio technology by the then School of Electrical Engineering in 1978.
- Steph Cook was our first Bath-based athlete to be crowned Olympic champion. In 2000, she won gold for Modern Pentathlon.
- In 2002, Team Bath became the first university team since 1881 to reach the third round of the FA Cup.
- Bath Abbey was first used for a graduation ceremony in 2004.



Campus

A crackin' library

Today Bath students enjoy all the *Creature Comforts* of our state-of-the-art, 24-hour library, but it wasn't always that way.

In 1995, major work began to extend and refurbish the building, and the library re-opened on 30 October 1996.

Oscar-winning director, writer, and animator, Nick Park CBE, had ribbon-cutting duties at the opening ceremony, during which he received an honorary Doctor of Arts. It really was *A Grand Day Out* for all involved.

With over a thousand seats, 500,000 volumes of books and periodicals, 450 computer workstations and wireless networking throughout, the library is the jewel in our teaching crown. And with 24-hour opening our students are able to work through the night to meet those essay deadlines; some have even been seen studying in their pyjamas during the wee small hours. (As much as we encourage our students to feel at home on campus, we can't help think that pyjama bottoms are *The Wrong Trousers* for a library.)

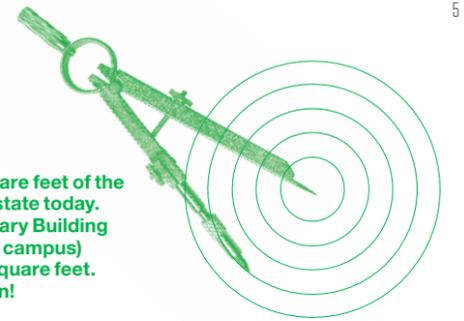


Left: Ron Ellis / Shutterstock.com

ON PARADE

2,826,160

The total area in square feet of the University of Bath estate today. In 1965, the Preliminary Building (the only building on campus) was a mere 52,978 square feet. My, how we've grown!



Students

The bear essentials



Why is there a tatty old teddy bear in BA2?

That's not a tatty old bear. That's Edward D Beare.

Is that supposed to mean something to me?

He was 'the fluffiest and cuddliest' SU Presidential candidate in 1977.

I can't believe I'm asking this, but did he win?

Of course not.

Because that would be silly.

No, because his campaign was hampered by the kidnapping.

By the kidnapping?

Yes, someone crept into Edward D Beare's room and kidnapped him. The ransom note was sent to the *Spike* office.

What were the kidnapers' demands – marmalade sandwiches?

No, Sugar Puffs. His seconder, Mick Bendall, was to go to a phone box on George Street, Bath, at 5pm and await further instructions. When the phone rang a voice told him to go to a phone box on Milsom Street. From there to Gay Street, the Circus and finally to Victoria Park, where he

was told to leave the Sugar Puffs by the fountain.

***Sugar Puffs by the Fountain* would make a good title for a John Le Carré thriller. Did you know he's an honorary graduate?**

Within a few minutes of leaving the boxes, a Mini pulled up and a schoolgirl clad in a gymslip jumped out to claim the ransom.

A school girl in a gymslip? Have you added that part?

No, it's all in *Spike* magazine. But the game was up. The car was surrounded and the bear was rescued from the schoolgirls. It's a good story, isn't it?

Why can't parliamentary politics be as interesting as this?

Campus

Due south

The South Building has had an eventful 50 years.

As the first building on Claverton Down, it was opened by the Mayor of Bath in 1965. The Preliminary Building, as it was known originally, was occupied by what was then our School of Biological Sciences, along with Sociology, a language lab, a library and a refectory.

In 1978, part of the South Building was gutted by a fire, which caused an estimated £100,000 of damage and an inestimable loss of research work.

Now known as 4 South, it's home solely to our Department of Biology & Biochemistry.

This year 4 South will see a new building next door: The Milner Centre for Evolution, named after alumnus Dr Jonathan Milner who donated £5million to our Look Further campaign. Focusing on fundamental evolutionary questions, the Centre will be the first of its kind in the UK.



£5,454.5M

The total donated by alumni and supporters towards our Look Further campaign.

Campus

Bloomin' lovely

The University's first horticultural officer, Bill Bowen, had to use his imagination when faced with a 'flat, sloping field' back in 1968.

It was his bright idea to create the amphitheatre, based on Gwennap Pit in Cornwall and associated with Methodist founder John Wesley. Our amphitheatre is still one of the best spots on campus to enjoy a sandwich and a sunbathe.

Bill – who was also responsible for laying out the University's famous collection of Yew trees – was awarded an honorary degree in 1995, and the Jubilee Garden, which sits in front of 4 East South, was planted in his memory.

From the Jubilee Garden to the wildlife pond and green wall at 8 West, via the Quiet Garden and the Wessex House rockeries, it still takes a lot of work to keep our 150 acres of land looking lovely. So it's little wonder that our dedicated and decidedly green-fingered landscape team have been multiple winners of the Bath in Bloom competition. Well done!

What's your favourite place on campus? Tell us at alumni@bath.ac.uk



Campus

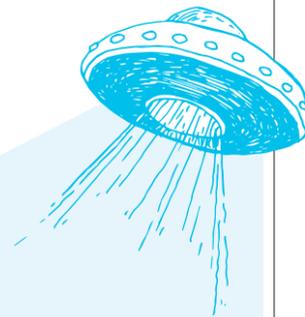
Under the microscope

This is the First Diagram of the University, drawn in 1963 while negotiations for the final site were still in progress.

It's an abstract 'concept' diagram of the proposed campus layout. "The focus of academic and community life is provided by a central pedestrian Parade."

How closely do you think it resembles campus today? Or does it look more like a hairy bug viewed through a microscope?

*Reproduced from The Proposed University of Bath: A Technological University. Development Plan Report Number 1.



Fundraising



Rags to riches

Here are some of our favourite RAG stunts from over the years. What were yours?

- £ Toll on Cleveland Bridge
- 👗 Alice in Wonderland fancy dress café crawl
- 👾 Human Space Invaders in the Abbey courtyard
- !?! Insults and compliments stall
- 🐚 Mermaids in Laura Place fountains
- 🚗 Car push up Lansdown Hill
- 🌱 Brussels sprout push up Milsom Street

A big thanks to all our wonderful, imaginative, crazy students who helped raise money for so many good causes over the years.

Read more about RAG on page 22.

Fundraising

Unusual Fundraising Outcomes

In 1976, as Tony Sawyer watched a worried motorist recount seeing a 'shimmering humanoid' walking the A46 near Bath on Nationwide, he realised that his RAG stunt had worked far better than he'd hoped.

It all started on a dark November night the week before. Tony and some of the residents of House 19, Eastwood, had set off a large flare on a hill several miles north of the city, while Lloyd Kelland, dressed in what Spike called an 'extremely effective space suit' made of mirror finish fabric, walked in an alien-like manner along the road.

This wasn't the first time a U.F.O-themed RAG stunt had been picked up by the media.

Back in 1967, strange lights hovering over the city were mentioned in the *Weekly Chronicle*. Although it wasn't proven to be a prank at the time, the paper did note that the RAG committee were missing from the main event – 'a rave at a discotheque in Guinea Lane' – when the sightings were reported. However, as you can see, the pranksters from '67 were more than happy to take credit the following week.

The UFO team IT WAS BATH'S HOAX OF YEAR





179

The number of medals won by Bath-based athletes at major championships in the last 20 years.

Sport

Hall of fame heroes

For every one of our world-beating sports stars there is a team of people working tirelessly behind the scenes. We pay tribute to three of those who have inspired our community of sportsmen and women to reach the top.

Our first Director of Sport, Olympic modern pentathlete **Tom Hudson**, pioneered the UK's first university sports scholarships programme. Martyn Hedges, a British Canoe Slalom Champion, became our first sports scholar in 1976 and more than 100 others have followed, generously supported by alumni and friends. Thank you Tom, and our community; together you have helped us to become one of the best sporting universities in the country.

Renowned coach **Malcolm Arnold OBE**, who retires this year, has been producing champion athletes for more than 40 years. He coached his first Olympic winner, John Akii-Bua from Uganda, in 1972. He's been based at the University since 1998, bringing out the very best in Dai Greene, Jason Gardener, Colin Jackson and Eilidh Child along the way.

University icon and Welsh international **Ivor Powell MBE** (pictured left) was posthumously inducted into our Hall of Fame for Sport on what would have been his 100th birthday last July. Football Head Coach Ivor first joined the coaching staff in 1972 and by the time he retired in 2010, aged 93, the *Guinness Book of Records* had recognised him as the world's oldest active football coach. The Ivor Powell Sports Scholarship Fund was set up when he died to support talented students here at Bath.



Campus



The University has a reputation for producing some of the best sportspeople in the world.

We are proud to include Olympic skeleton champion Amy Williams MBE, England rugby legend Steve Borthwick and double Olympic gold medallist rower Heather Stanning MBE in our alumni community. But did you know that Dave Wright, Ashley Cockrill, Jeff Green and Roger Ibbett also studied here?

Their names might not be as well known today, but back in 1976 this fantastic foursome were the talk of campus when they set a new University record playing a marathon 60-hour game of billiards. These four young chemical engineering students bravely cued and potted from Friday night right through to Monday morning.

No medals were won and no honours bestowed that weekend, but £50 was raised for RAG (a tidy sum at the time). So, to our unsung sporting heroes, Dave, Ashley, Jeff and Roger – we salute you.

By the way, the final score was 2,800 to Dave and Jeff and 2,001 to Ashley and Roger.

Research

Double honours

The Queen's Anniversary Prize for Higher and Further Education is the highest possible recognition a university can receive for the quality of its research – and we have won it twice.

In 2011 we received the award for our **Department of Social & Policy Sciences'** 'influential research into child poverty and support for vulnerable people'.

The impact of this research on policy and practice has improved the quality of life for families and children, not least through direct involvement with UK government legislation on tax credits and child poverty, as well as engagement with policies to address extreme poverty.

Professor Dame Glynis Breakwell said: "This most prestigious award provides official recognition to all those involved in the research, and to the University as a whole, and is something we can all take great pride in."

We were also awarded the prize in 2000 to recognise the 'invaluable services to industrial and scientific communities' of the Centre for Power Transmission & Motion Control within our **Department of Mechanical Engineering**.

Our researchers have a reputation for excellence in improving engine efficiency, with a strong tradition of working in high impact partnerships with industry. Our proposed Institute for Advanced Automotive Propulsion Systems will enable Bath to remain at the forefront of automotive research.



Alumni

Our highest honour

In 50 years we have welcomed almost 100,000 alumni into our community around the world. And among their number we are delighted to count around 500 remarkable men and women as honorary graduates.

Here are just a few of our most notable honorary graduates:



Dr Aung San Suu Kyi
(Honorary LLD 1998)



Alumnus **Dr Raymond F Schinazi**
(Honorary DSc 2006)



Sir David Attenborough
(Honorary DSc 1981)



Dame Maggie Smith
(Honorary DLitt 1986)



Sir Ian McKellen
(Honorary DArts 2001)



Sir Bobby Charlton
(Honorary LLD 2016)

We hope their success and association with our University continue to inspire our community.

BATH

Uncut

WE LOOK BACK AT FIVE DECADES OF STUDENT JOURNALISM AND TALK TO SOME OF THOSE RESPONSIBLE FOR WRITING THE UNOFFICIAL HISTORY OF THE UNIVERSITY OF BATH.

Words Martin Cornish



Deep in the library vaults, alongside the official annals of our history, there's an alternative record of the past 50 years; one of protest, politics, sex, drugs and rock and roll: the student newspaper archive. And as I flick back through the pages of *C.A.T.ALOG*, *SUL*, *Spike*, *Sponge* and *Impact*, I'm struck by the amount of work that has gone into them. I have nothing but admiration for our young journalists, of course, but wouldn't they have rather spent their time dancing the night away at Bog Island, than slaving away over copy on campus?

ITV's *Good Morning Britain* presenter, Ellie Barker, disagrees. "It was the main reason I wanted to go to the University. It was a lot of work [but] the practical experience I gained [as *Spike* editor in 1994] helped me immensely with my next step into the world of journalism." Former *Guardian* and *Financial Times* journalist Deborah Hargreaves also sees her time at *Spike* as instrumental in launching her career, and Sue Ryan (née Willis), who has worked at the *Daily Mail*, *Mail on Sunday*, *Today*, the *Observer* and the *Daily Telegraph*, says that nearly every journalist started out on a student paper.

Practical experience is clearly a great reason to become a student journalist, but others are motivated by a belief in the important role the student newspaper plays. "[They] serve several purposes," explains Martin Nesirky, former *Reuters* correspondent and *Spike* editor in the eighties. "Not only offering a training ground for would-be journalists, graphic designers, editors and others, but also informing and entertaining students in a style they understand and providing practical information and news that other outlets are unlikely to cover."

Ellie believes that student newspapers help to ensure students have their own voice. Something that former political adviser, Tony Kerpel MBE, believes was even more important during his tenure at *SUL* in the sixties. "[It] provided a means of establishing a Bath student identity, which was of particular importance because of the geographically split-site nature of the college [between Bath and Bristol]." Nick Savage, joint editor of *SUL* with Keith Cameron shortly after Tony, agrees: "A student newspaper in the context of the 1967 to 1971 period – a new campus location, new university – was very important."



All images taken from *SUL*, *Spike*, *Sponge* and *Impact*

"I visited a Soho strip club and wrote an unexpurgated account of the delights on show."

In 1960 we were known as the Bristol College of Science and Technology, and based mainly in our neighbouring city, but the following years saw huge change at Bath: work began on the Claverton Down campus in 1965 and we were granted our Royal Charter in 1966, making us the university we are today.

Change wasn't limited to our little hill during that time, of course. Shockwaves were being felt around the world as the cultural and political revolutions of the 1960s were in full swing. I ask Tony and Nick what were the dominant issues of the day for students back then.

"This was the time of student revolt and many campuses were experiencing serious disruption over the issue of student representation in the running of universities," explains Tony. "Through the newspaper we articulated student demands for both facilities to be built and representative structures through which the student voice could be effective." Nick agrees that the dominant issue for his readers was "the build-up of a new university on a new campus."

The seventies were politically charged here at Bath, and Sue recalls students almost turning over Enoch Powell's car when she was editor of *SUL*. "[He] came to the University – or at least a hall close by – and students staged a protest. There were also some student marches, the chant was 'Maggie Thatcher, milk snatcher' in reference to her policy of stopping free school milk [as Education Secretary in 1971]."

Deborah remembers a Labour Party in disarray and upheaval during her time writing for *Spike* in the eighties.

"The Gang of Four had left the Labour Party and set up the SDP. I interviewed Shirley Williams at a rally in Devizes. She predicted I would have a good career in journalism."

The anti-apartheid movement and student politics were also big issues on campus during that time, according to Martin, and Deborah remembers campaigning against an introduction of student fees, loans and top-up payments. "We were lucky enough to benefit from government grants for our tuition and maintenance, and we strongly felt these should remain."

Tuitions fees remained a hugely contentious subject during the 2000s, according to Tom Vincent, who edited *Impact* in 2002–03, but he admits that some of the biggest issues of the day weren't covered. "The invasion of Iraq took place while I was editor, [but] it received less coverage in our pages than you might imagine. It often felt that items that were getting lots of column inches in the national press were less interesting in a student paper, unless they had a specific bearing on us."

Ellie agrees. "It was mainly about students coming to university, many of them leaving home for the first time. It was about them finding their way, whether that was a music review, a piece about their travels, a piece about their hopes. We tried to make the content as relevant to as many students as possible."

But the student newspaper is more than just a record of the issues and concerns of the day; it's a place where young writers can find their voice, flex their journalistic muscles and test the boundaries. None more so than in the early days, according to Sue. "It was the sixties, boundaries were being pushed all over the country and we just went with the flow. We didn't really feel we had boundaries."

"Pushing boundaries was part of the zeitgeist," agrees Tony. "In the interests of fearless exposé journalism I visited a Soho strip club and wrote an unexpurgated account of the delights on show. Our printers refused to publish this article on the grounds of obscenity. So we went ahead with our own version rolled out on a duplicating machine and inserted this loose leaf article into *SUL*. It caused both offence and amusement. How ironic that four years later I joined the British Board of Film Censors as its youngest film examiner."

It wasn't controversy for controversy's sake for Deborah. "We were keen to be provocative and campaigning, but equally eager to be taken seriously. So while we did take risks, we also wanted to be a voice that would be listened to."

Nick isn't conscious of pushing any boundaries at the time, even if he agrees it might appear so in hindsight. "[However] the journalistic principle is to reveal facts that other people want to conceal. We drove the paper on that basis."

One issue of *Spike* in 1982 revealed a little too much of a group of revelling engineers, and was considered more exposure than exposé by the University. "The newspaper had to be withdrawn because a photograph was considered to be too risqué," explains Martin. "Probably not our finest hour, but no lasting damage, I believe."

Producing a student newspaper every fortnight whilst studying full-time is bound to lead to the occasional error of judgement. Sue admits devoting a whole front page to a picture of Che Guevara – "I have no idea why. It looked very striking but we didn't even try to write copy to justify it" – and Ellie once took a rather rose-tinted view of *Spike*. "One issue was pretty much entirely pink. I am not sure I would do that again today, much as I still love the colour."

Below: This survey closed in November 1968. Please do not send us your answers.





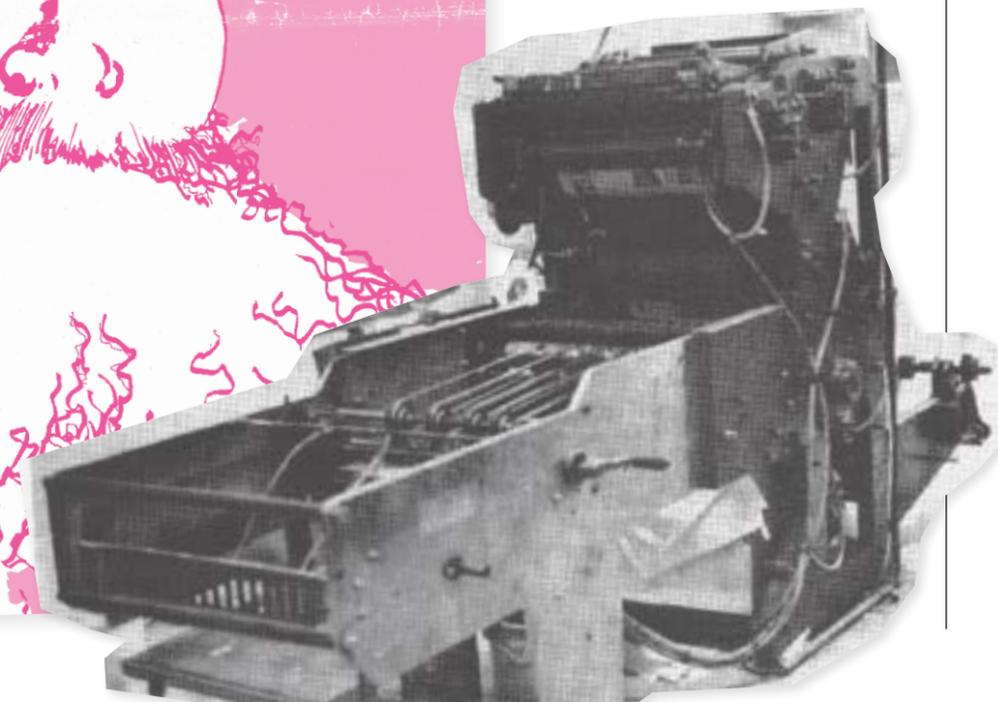
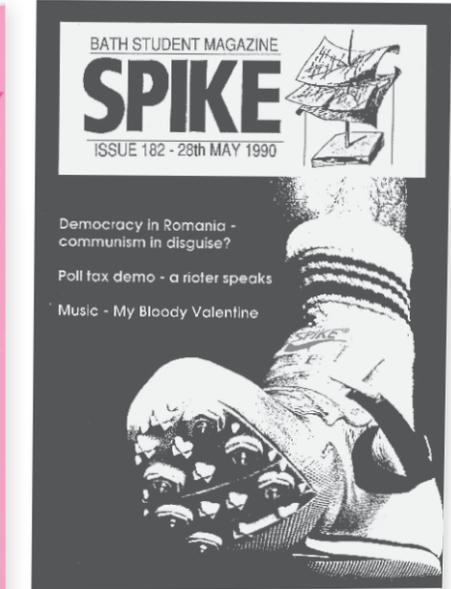
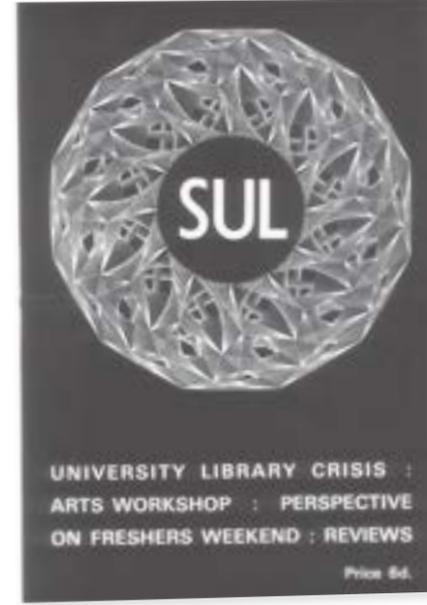
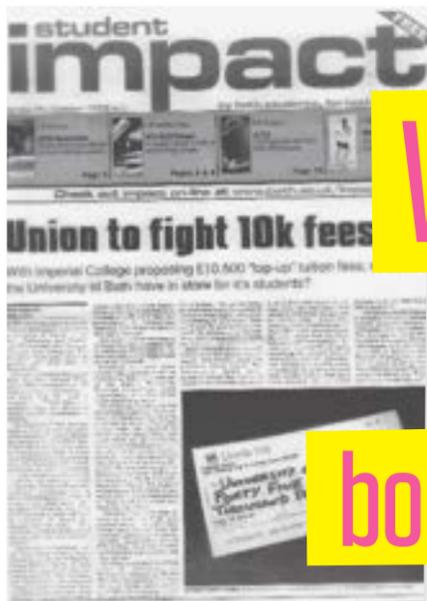
“It was the

sixties.

We didn't really

feel we had

boundaries.”



The Hilarity Of Nuclearity

OCCUPATION- VC SPEAKS

One issue of the newspaper had to be withdrawn because a photograph was considered to be too risqué.

I ask our journalists if they feel they ever changed anything at Bath. Tony explains that as our University was being created during his time, change was inevitable. "There were no traditions, no proper student facilities, and so to a great extent we could work with the Vice-Chancellor to create the basis for future generations."

Deborah remembers campaigning against proposals by the then education secretary, Keith Joseph, to introduce student loans or fees. "He dropped these plans in 1984, so collectively, student protest had maybe worked." Tom used *Impact* to help a number of students get their deposits back from 'an unscrupulous letting agent' and Sue thinks *SUL* may have contributed to ending the University beauty queen contest (yes, we really had one).

Our student journalists' growing list of accomplishments brings up the question of pride. Tony insists he doesn't do pride, but he does concede to being "pleased that [he] championed free speech for all shades of opinion." Ellie is proud of *Spike* winning a Guardian Student Media Award under her editorship, but both Tom and Martin are just happy that they may have encouraged others to consider a career in journalism. "And if not," adds Martin, "I hope it made the fish and chips taste better."

Nick was most proud of getting a paper made and in the hands of students on time every fortnight, which is not surprising when you consider the process he and his team had to go through to get *SUL* to print. "A life-size layout had to be done. Copy was type-written and then had to be set in letterpress type fonts at the printers. Pictures had to be sourced hard copy, and photographic printers' blocks manufactured."

Reading through the editorials and interviews, the features and gossip columns, it's obvious that our journalists took their work seriously: they write with passion and conviction; there are no half measures here, no pulled punches. I wonder what they think when they look back at their work today. Do they recognise themselves?

"Absolutely not. I wince at what I might have written," says Sue. Ellie and Nick feel similarly abashed. "I would [recognise myself] but I would almost definitely cringe," admits Ellie. Nick remembers "a particularly florid and grossly over-written editorial" which still causes a severe cringe of embarrassment.

The occasional piece of purple prose or misjudged polemic may cause the odd blush today, but without the hard work and dedication of our student journalists during a time when the pressure to succeed is matched only by the peer pressure to head to the SU Bar for a few pints, we wouldn't have our wonderful unofficial history of the University of Bath. Thank you to everyone who contributed to *C.A.T.ALOG*, *SUL*, *Spike*, *Sponge*, *Impact* and *BathImpact* over the years. If you ever feel like reading some of your old handiwork, you're always welcome to come back to campus and take a look at the student newspaper archive.

And, if you're reading this in your first year and feel like getting involved in journalism at Bath yourself, I'd recommend taking some time out of your day to look through our archive. You'll find plenty there to inspire, entertain and educate... and far more nudity than you might expect.

You can read the full interviews with our former student journalists on 50years.bath.ac.uk

Contributors

Ellie Barker (BSc Sociology 1996) is a presenter for *ITV West Country*. She started as a runner at GMTV before training at Central and HTV newsrooms. She has also worked as Scotland correspondent at GMTV and as a presenter on *BBC Look East*.

Deborah Hargreaves (BA MLES German 1983) is director of the High Pay Centre and Chair of the London Child Poverty Alliance. She is a former business editor of the *Guardian* and has previously worked at the *Financial Times*.

Nick Savage (BSc Sociology 1971) started his career in HR management, and has worked as Industrial Relations Director at News International (now News UK). *SUL* co-editor, Keith Cameron, did the same, becoming Director of HR at Marks & Spencer. Nick is now freelancing in HR.

Tony Kerpel MBE (BSc Sociology 1968) was a special adviser to Kenneth Baker from 1986-92 and an adviser to President de Klerk during the transition to black majority rule in South Africa. He was also a film examiner at the British Board of Film Censors.

Tom Vincent (MEng Automotive Engineering 2004) works as an engineer with consultancy firm, Ricardo. He has also worked as a music photographer and ran his own business specialising in photography at student balls with a fellow Bath alumnus.

Sue Ryan (BSc Humanities & Social Sciences 1972) is a media consultant, Director of the Henley Literary Festival and a former managing editor of the *Daily Telegraph*. She has worked at the *Daily Mail*, *Mail on Sunday*, *Today* and the *Observer*.

Martin Nesirky (BA MLES German/Russian 1982) is the director of the United Nations Information Service in Vienna and a former *Reuters* correspondent. He has also worked as spokesman for UN Secretary-General Ban Ki-moon.

PROBE
Tony Kerpel (SUL Editor)



Deborah Hargreaves

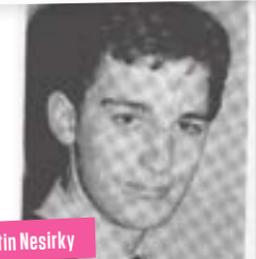


On her way to a career in journalism.



Sue Ryan

Martin Nesirky



**FORMER SPIKE
EDITOR MARCHED
OUT OF MOSCOW**



Ellie Barker

Nick Savage

Tom Vincent



FUTURECAST

**HOW DISCOVERIES BEING
MADE AT BATH TODAY
COULD SHAPE OUR WORLD
IN THE NEXT 50 YEARS.**

Words Rachel Skerry and Martin Cornish

Half a century ago, at the New York World's Fair, Isaac Asimov predicted what the world would be like in 50 years' time. And although we don't drive hover cars or live in subterranean cities today, virtual reality, cordless appliances, miniature computers and Skype are no longer the stuff of science fiction.

Asimov's prescience was impressive, but it's the researchers who informed his predictions who are the real heroes – they didn't just predict the future, they made it happen.

There's no doubt that if Asimov was set a similar task today, the University of Bath is somewhere he would look for inspiration. We're already changing the way we live with the development of low emission engines and zero carbon houses, and as our reputation for world-leading research grows, so too does our influence in shaping the future.

To celebrate our golden anniversary, we take a glimpse into the year 2066 and show you how the University is helping to make science fiction a reality.

IN 50 YEARS' TIME WE COULD HAVE ROBOTS SMALL ENOUGH TO ENTER LIVING CELLS AND FIGHT VIRUSES.

Researchers from our Department of Physics took a step closer to making Asimov's novel, *Fantastic Voyage*, a reality this year, when they worked with the University of Cambridge to develop the world's tiniest engine.

The engine is made of charged particles of gold, bound together with temperature-responsive polymers and is only a few nanometres wide. To give you some context, a human hair is roughly 60,000 nanometres wide.

When the engine is heated with a laser the gold particles bind together into tight clusters, and when cooled, it expands like a spring. "We know that light can heat up water to power steam engines, but now we can use light to build a piston for engines at the nanoscale," explained Dr Ventsislav Valev.

It is predicted that these nano-engines will be used to power miniature robots called nanobots which could be injected into our bodies to battle it out with viruses, bacteria and fungus, or to perform surgery on a single cell.

Although nanobots are still very much a theory at the moment, nano-engines developed by the University of Bath could make that theory a reality by 2066.

IN 50 YEARS' TIME A DRONE COULD 'PRINT' YOU A HOUSE.

When a natural disaster strikes it can make thousands of people homeless. Our researchers are in the early stages of developing the world's first robotic drones which could fly to a disaster zone, scan and model the landscape, design temporary shelters and 'print' them on the spot.

Researchers are working with Imperial College and University College London to develop a 3D printing system that can manufacture structures such as shelters and bridges.

While current systems can create structures very quickly, their large size means it's difficult for them to get to remote and rural areas. Our research team plans to miniaturise 3D printing to make it more mobile, so that it can fly to and land at a construction site and create complex buildings from scratch.

"It's an ambitious project which will push the forefront of construction technologies into the future," said Dr Richard Ball from our Department of Architecture & Civil Engineering. "And it's exciting to be working on a project where the structure has to be so light and efficient that it can be built by small flying drones," added Richard's research colleague Dr Chris Williams.

Swarms of flying robots is an image you're more likely to associate with a galaxy far, far away rather than mid-21st century Earth. But, thanks to our research, 50 years from now it could be a life-saving sight for thousands of people around the world.

IN 50 YEARS' TIME WE MIGHT NOT NEED AN EGG TO MAKE A BABY.

Our scientists overturned two centuries of received wisdom this year, when they showed for the first time that it's possible to make viable embryos from non-egg cells.

Starting with unfertilized mouse eggs, researchers 'coaxed' the eggs into becoming embryos using chemicals, and then injected them with sperm. Baby mice born as a result of this method appear healthy and are able to produce at least two generations of offspring.

Because the injected embryos have much more in common with cells in our bodies than they do with eggs, the results suggest that, one day, it might be possible to combine sperm with body cells, such as skin cells, to form an embryo.

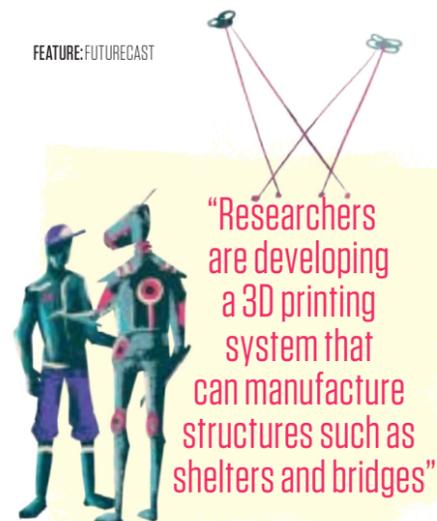
"Making a baby from skin cells remains in the realm of science fiction," said Dr Tony Perry from our Department of Biology & Biochemistry. "There are many obstacles, but it looks like some are already being removed."

"Our research has taken us closer to understanding how fertilisation works, which could one day have implications for treating infertility or breeding endangered species."

IN 50 YEARS' TIME WE COULD CHANGE THE COLOUR OF OUR CLOTHES TO SUIT OUR MOOD.

Would you like a shirt that lights up? Or wallpaper which changes colour at the flick of a switch? They're just two of the possible future applications of research into creating lightweight and flexible electronics.

Researchers from our Department of Physics are working with partners across Europe in the EU-funded project EXT MOS (EXTended Model of Organic Semiconductors). They're developing semiconductors that can be printed onto film, which can, for example, create wearable displays controlled remotely through a wireless link.



"Researchers are developing a 3D printing system that can manufacture structures such as shelters and bridges"

"The process of developing new materials is very time-consuming," said EXT MOS coordinator Professor Alison Walker. "By theoretically predicting the motion of electronic charges in these materials, we can test out new materials in a virtual environment before making and testing the most promising combinations in the lab."

One technology being developed is organic LEDs – films of layered semiconductors, made from carbon and hydrogen, that light up when an electric current is passed through them. Because the films are just 0.3mm wide, they can be made in a variety of sizes and shapes and fitted in different parts of a room, or even used to create animated screens or wirelessly updatable wallpaper.

Wearable organic electronics are still some way off, however, but we'd love to see colour-changing clothes hitting the catwalks in 2066. Watch this space.

IN 50 YEARS' TIME YOU COULD SAVE ON YOUR ELECTRICITY BILL BY SPENDING A PENNY.

Every time we go to the toilet we're flushing money away. But why spend money treating our waste, when we could be using it as a source of energy instead?

Our Departments of Chemical Engineering and Chemistry have developed a tiny microbial fuel cell which turns urine into electricity. When urine passes through the fuel cell, electricity is generated by the bacteria, which can be stored or used to directly power electrical devices. A small stack of cells can generate enough 'pee power' to charge a mobile phone.

Costing as little as £1 to make, these cells are powerful, green and cheap to run, which means they could provide a way of generating much needed electricity in remote areas of the world.

"It's exciting to have created technology that can potentially transform the lives of poor people who don't have access to, or cannot afford, electricity," said PhD student Jon Chouler, who is supervised by Dr Mirella Di Lorenzo and Dr Petra Cameron. "I hope this will enable those in need to enjoy a better quality of life as a result."

IN 50 YEARS' TIME A ROBOT COULD BE YOUR BEST FRIEND.

One thing about 2066 seems inevitable: there are going to be a lot more robots. And to make sure they're more like C-3PO than the Terminator, our researchers are investigating ways to improve human-cyborg relations with help from their very own humanoid robot, Nao.

"We're exploring a future where public spaces are inhabited by both people and socially aware robots," said Dr Chris Bevan, who works in the CREATE lab, within our Department of Psychology.

"There are many unspoken rules of human interaction: whether or not to look people in the eyes, how firm to shake a hand, whether to smile, what words of greeting to use. Little things like this can lead to big judgements about trustworthiness or social acceptability. Our research is finding out how we can use this type of behaviour to help humans and robots interact."

Results from experiments using Nao suggest that robot makers need to consider more deeply the effect gestures such as handshakes have, and to enable them in their designs. It's work which could transform the way robots are designed in the future.

IN 50 YEARS' TIME ROAD TRIPS COULD BE DRIVERLESS AND TRAFFIC JAM FREE.

In the last few years the idea of driverless cars has moved from fiction to reality: trials have already begun in Milton Keynes and more are planned for Greenwich, Bristol and Coventry.

On the face of it, this seems like a good thing: cars controlled by computer won't drive as fast as possible, won't exhibit irrational behaviour and will have far faster reaction times, meaning they can drive closer together. However, in the short term at least, they will still have to share the road with us, and that's where problems could lie.

Traffic is already considered a complex system, but incorporating two types of driver further complicates the mathematical challenge of understanding how vehicles interact, not least because of the lack of available data on driverless vehicles.

Our Institute for Mathematical Innovation (IMI) is drawing together mathematical expertise from across the University to address a wide range of problems for industry and the public sector, and Dr Lorna Wilson, IMI Commercial Research Associate, thinks this is just the sort of thing they could help with: "Applying mathematics to the exciting developments in autonomous transportation is exactly the sort of innovative interdisciplinary research the IMI has been set up to undertake."

By using cutting edge mathematics to understand how we interact with autonomous drivers, our researchers could help to make your journey to our centenary celebrations in 2066, quicker, safer and traffic jam free.

Fifty years from now, we hope that some of you will dust off this copy of BA2 (or ask your robot to do it for you) to see which of our predictions have come to pass. And we hope you'll remember our brilliant researchers, toiling away on campus back in 2016 because, to borrow Asimov's words, "There is not a discovery in science, however revolutionary, however sparkling with insight, that does not arise out of what went before."

Our University has been a place of discovery for 50 years, and the research which is happening here today is part of that continuum. So here's to the next 50 years. If they're anything like the last, the future's bright.

Discover more about our research at bath.ac.uk/research





INTERVIEW WITH A ZOMBIE

THIS YEAR'S RAG CHAIR TELLS US WHY FUNDRAISING IS IN HER BLOOD, AND HOW SHE'S REUNITING ALUMNI TO CELEBRATE 50 YEARS OF 'RAISE AND GIVE' AT BATH.

Words Rachel 'Scary' Skerry

“Are you a zombie or a marshal?” is the question which greets each student as they hurry past me from Happy Hour at the Plug on a Friday evening in October. I'm neither; instead I'm here to watch the launch of what's become the biggest event in the University of Bath's RAG calendar.

Zombie Apocalypse sees students team up to solve riddles and puzzles in 10 different zones around campus (think *The Crystal Maze* in the dark) while dodging fellow students smeared with face paint, dressed in ripped t-shirts stained with fake blood, and armed with ultra-violet pens.

When all 10 zones have been completed and participants scanned for UV 'zombie bites', everyone heads down to the Tub for a Halloween-themed club night – presumably featuring Michael Jackson's *Thriller* on the setlist.

Dozens of aspiring zombies are crammed into the Students' Union briefing room, getting ready for the night's action. “Scaring the shit out of people,” is the answer I get, with a grin, when I ask Jenny, a first year, what she's most looking forward to.

Second year Michael, in hi-vis, gives a more considered response. “This is my second time – I was a marshal last year too. It's my job to tell people what to do.”

Michael is assigned to Zone 2 (or 3 East 2.1). “The objective is to find a torch in an unlit room,” he explains. “We've separated the batteries from the torch, so they have to find both to get it working, then use the torch to find the exit.”

I find this year's RAG Chair, Joanna Phillips, considering her costume options: standard ripped t-shirt zombie or cheerleader zombie? Joanna, who's in the second year of a Politics & International Relations degree, is keeping a family tradition alive – her Dad, Electrical & Electronic Engineering graduate Mark Phillips, was RAG Chair in 1984. Did she consciously choose to come to Bath and follow in his footsteps?



“RAG SHOULD
BE ABOUT
TRYING OUT
WHATEVER
WACKY IDEA
YOU’VE GOT IN
YOUR HEAD”



“It probably did influence me on some level,” she admits, “because I’d hear my parents and their friends talking about what a good time they had had at Bath.” Mark and Brigid (née Herten) met as students, got married and had Joanna and her brother Sam. Twelve years ago, Brigid died from cancer; since then Mark has volunteered for Cancer Research, and regularly took Joanna and Sam to fundraise at Wembley Arena, which is close to where the family live.

“Growing up, I had lots of experience shaking buckets,” Joanna explains. “So in my first year, when RAG was advertising for a Raids Officer, I stood, got elected and suddenly received around a hundred emails: ‘welcome to RAG committee’, ‘this is the agenda for our first meeting’, ‘we’re having a social’. I thought: ‘What’s happening?!’”

A year spent bucket-shaking across the South West inspired her to run for RAG Chair – now her inbox is even more out

of control. Joanna is responsible for running a committee of 11 students, overseeing budgets and events, liaising with charities and representing RAG to the University. No wonder her housemates reckon she has more hours in the day than the average person.

“They don’t understand how I fit it all in. I spend at least two to three hours every weekday just in meetings, then more time helping with the running of RAG on weekends,” she says. “Sometimes I find it’s easier to motivate myself to do RAG work than to write my essays, because you can see the effect of what you’re doing straight away, and how RAG changes people who get involved with it. And I’ve learned that because everyone is a volunteer, taking the time to thank people goes such a long way. That’s something that will stay with me for life.”

RAG has been part of student life for 50 years, and in that time it has raised more than two million pounds for

hundreds of good causes. ‘Stunts Day’ was a fixture on the University calendar – *Spike* magazine in 1987 defines it as “a day when you can dress up in silly clothes to raise money for charity with no danger of being arrested for it”.

Many alumni will have a favourite memory of RAG’s most audacious fundraising stunts, from see-saw challenges to car pushes, human space invaders in the Abbey courtyard, mermaids in the Laura Place fountains and rubber ducks racing down the River Avon. And apart from an alleged ‘theft’ of the Minerva’s Head from the Roman Baths, which threatened the harmony of town and gown relations (and caused the Chief Constable to cancel the 1966 RAG pedal car race as retribution), for the most part the city has indulged, or at the very least put up with, the antics.

Bath RAG doesn’t tend to hit headlines these days – I ask Joanna what she thinks has changed. “I think stunts have become a lot harder to do,” she says.



1

Overleaf: RAG
Chair Joanna
Phillips

2

Mark (left) and
friends, 1985

3

Mark (as Freddie
Mercury) and
Joanna

“In the past, if students did something stupid it would be laughed off; now the University seems much stricter about it. For example, when we saw the old RAG photo of the students wading into the lake, my publicity officer asked me ‘Why can’t we go in the lake?!’ But I think the biggest change – and the challenge for us – is that students don’t feel they can spare much time for things like RAG, because they’re paying so much money to study.”

Although Bath RAG has left behind its more anarchic fundraising stunts, it’s in rude health, having raised almost £400,000 for charity in the last five years alone. As well as the Zombie Apocalypse, this year RAG is running a *Take Me Out* event – based on the TV series – and the Charity Hitch, which challenges pairs of students to make their way almost 400 miles from Bath to Edinburgh without spending any money.

“We’re doing events that have a really wide appeal,” Joanna explains. “Many students who come to our events didn’t come to uni ever thinking they would volunteer, or do anything for charity. People get involved in Zombie Apocalypse because it’s a laugh.”

“I think RAG should be about trying out whatever wacky idea you’ve got in your head. In Freshers Week we had a giant inflatable dinosaur on the Parade – it definitely drew some attention! That’s something my Dad told me: in his year they just tried everything, and even if only half of it worked, they knew for the next year which half to stick with and which to cut.”

I bump into Joanna’s Dad, Mark Phillips, at the Rec, cheering the University

Rugby team to victory on our 50th anniversary, and ask him about some of his favourite RAG memories.

“I was recruited to RAG in 1982, as a first year, and soon found myself in the thick of it,” he recalls. “RAG had failed to attract a big name band for RAG week and so had booked two local bands as the headline and support acts. By the time the date came around, however, these two ‘up-and-coming’ bands were numbers one and three in the charts respectively: they were Tears for Fears and the Thompson Twins. Touts appeared outside offering tickets to the highest bidder. Aggrieved that this was taking money that should be going to charity, we went outside and touted tickets ourselves!”

Mark’s motto was “the madder the better”. From setting up toll booths on Cleveland Bridge, to being chased through Weston-super-Mare on a four-wheeled bicycle by a police horse, he certainly lived up to it. Although even he will admit that they went a bit far with their Toga Bounca-teque: “It was a disco where we filled the hall with bouncy castles, combined with a cheap beer promotion. Not to be repeated, given the level of injuries!”

How does he feel about his daughter doing the job he once did? “I’m always proud of Joanna – she is an amazing young woman – so I wasn’t surprised that she was elected as RAG chair. I’m grateful for the opportunities that Bath continues to provide for students today, and that Joanna has continued our family values of helping others and getting the most out of life.”

He credits Bath for “four amazing years of fun, camaraderie, pranks, fundraising, hellraising, learning and actually getting a degree (two to be precise).” And he describes his RAG friends as “a group of people who I still count as my best (and definitely maddest) friends, 35 years later”.

Mark and his friends still reunite for a summer holiday every year or two, and one Charity Hitch event even resulted in a wedding in 2012 (congratulations Sam and Adrian!). Proof, if it were needed, that RAG really does bring people together. And the zombies – sorry, students – here tonight, chatting, eating pizza and taking selfies before they’re released into the autumnal darkness, are part of that story too, keeping the spirit of RAG alive.

This year Joanna is bringing five decades of RAG committee members back to campus for the 50th Anniversary RAG Ball.

“With Bath RAG turning 50 we thought that our own reunion was long overdue,” she says. “I’m so excited to hear stories from the last 50 years of student fundraising and I hope as many people as possible will come along. Having all the RAG generations under one roof promises to be a massively entertaining night, although I’m not sure how well prepared the University is to welcome my Dad and all his friends back again!”

We hope to see many of you in the Claverton Rooms on Friday 18 February for what we’re sure will be a special night of fun and fundraising. A zombie costume is optional. ♡



WE IMAGINE HOW THE UNIVERSITY OF BATH WOULD FACE THE BIG FIVE-OH, AND FIND OUT HOW PRESCRIPTION PILATES, COUCH-POTATO COWS AND ROBOT NURSES COULD HELP ALL MIDLIFERS LOOK FORWARD TO A HEALTHIER AND HAPPIER FUTURE.

Words Martin Cornish



So, I've reached 50. How do I feel about scoring my half-century? I can't complain. Although, the candle to cake ratio at the birthday party was slightly alarming.

But, I'm feeling strong, as ambitious as ever, and so far, touch wood, I've managed to avoid those awful embarrassing midlife clichés. I'm facing later life with dignity and integrity. Dignity and integrity; now, that would make a great tattoo.

I'm probably a little bigger than the last time you saw me. When Bob Hope said that middle age is when your age starts to show around your middle, he could have been talking about me. With the Edge, the Quads, 4 East South and 10 West all popping up in the last few years, my BMI (Building Mass Index) is off the charts. But, if you'll allow me a little boasting, most university guides and rankings just seem to think there's more of me to love.

However, there's no time to rest on my laurels. There's lots still to do, and, according to Dr Christian Yates from my Department of Mathematical Sciences, less time in which to do it in; or at least that's how it seems.



THE WAY THINGS ARE GOING US MIDLIFERS WILL STAY MIDDLE-AGED FOREVER

"One theory is that we perceive a period of time as the proportion of time we have already lived," he explains. "So, the time between birthdays appears longer for a child as it's a bigger proportion of its life so far. For a 20-year-old to experience the same proportional increase in age that a two-year-old experiences between birthdays, they would have to wait until they turned 30." No wonder I feel like I have a birthday every couple of months.

But I'm not worried about ageing. When I was founded in '66, 50 was considered old, now it's middle-aged. The *Oxford English Dictionary* says middle-aged is anything up to 65. The way things are going us midlifers will stay middle-aged forever. But even when it comes, old age isn't what it used to be. Our generation can look forward to a healthier and happier future, thanks to the research taking place here, like a major new project looking into the benefits of exercise in old age.

We all know we should be doing more to keep fit, but is staying active so important to the future of our physical and cognitive health that GPs should be writing subscriptions to exercise classes rather than prescriptions for pills? Dr Afroditi Stathi and her team from my Department for Health are exploring the effectiveness, and cost-effectiveness, of just such an idea in a project called REACT (REtirement in ACTION).

Working with groups of people over 65, the REACT team are developing a 12-month physical activity and social programme to assess how effective exercise is in preventing mobility problems, and whether it can slow, stop, or even reverse them.

"We are working across England, in inner cities, suburban and rural settings, to get a real understanding of whether this programme can deliver benefits for older people from all walks of life," explains Dr Stathi.

As part of the programme development, participants are also invited to undergo an fMRI scan to monitor the direct effect of exercise on the brain. The team are hoping the results will provide hard evidence of the impact of an active lifestyle on cognitive function in later life.



"This is a unique opportunity for us to carry out research which could lead to substantial gains for both individuals and wider society," Dr Stathi explains. "We are building on a programme that has already been successful in the US so we are optimistic that we can deliver real benefits to the people who take part."

So, it's clear that avoiding health problems can lead to a greater quality of life, but it also reduces the impact on health and social care services, meaning they will be there when we need them most.

My School of Management's latest research centre, the Bath Centre for Healthcare Innovation and Improvement (CHI²), is also looking at new ways to improve these services by examining how system changes and the use of resources impact on patient outcomes and experiences.

They are currently working with clinicians and managers at Bath's Royal United Hospital to try to understand the reasons behind variations in the way national clinical guidelines are implemented in the provision of emergency stroke care.

Dr Christos Vasilakis, Director of CHI², explains: "We know that improving the quality of health and care services is difficult. We also know that it is very challenging to bring in new and better ways of organising health and social care services."



**THERE IS SOMETHING WE CAN
ALL DO NOW TO LOOK FORWARD TO
A HEALTHIER AND HAPPIER FUTURE:
CHANGE THE WAY WE THINK ABOUT IT**

“However, by taking a systems perspective and an evidence-based approach we hope that we will help the health and social care organisations we collaborate with to improve services for users, and that lessons learnt from the improvement process can be used to inform practice at a national scale.”

Our healthcare services need all the help they can get, especially when you read that almost a quarter of the UK population is expected to experience osteoarthritis in their knees at some stage in their life. Professor Richie Gill, from my Centre for Orthopaedic Biomechanics, is discovering more about the knee cartilage to better understand, and ultimately treat, the condition.

By studying horses' and cows' knees for comparison, Professor Gill is able to make correlations between the lifestyle of an animal and the form and function of its knees. It seems that horses' knees are like those of 'well evolved joggers' and cows' are more like those of 'domesticated couch potatoes', with each having their own unique set of problems and lessons we can learn.

“Evolution in human knees may have increased our range of motion, but not driven significant change in cartilage,” he explains. “Our observations have significant implications for the study of human knee cartilage and its diseases.”

Exercise, an efficient health service and knees like a grasshopper will certainly make you healthier and happier in the future. But there's going to come a time when we might need a little more help. Designability (Bath Institute of Medical Engineering), one of our collaborative partners, thinks they might just have found the answer to our long-term care needs: robots.

Designability is leading a consortium of researchers, care providers and robotics experts in a project called CHIRON (Care at Home using Intelligent Robotic Omni-functional Nodes). The project aims to develop a connected system of modular robotic components which can be mixed and matched to undertake a wide range of domestic and self-care tasks.

“We are tremendously pleased to contribute to this work as the project is all about technological innovation and perfectly complements other work within the Innovate UK Long Term Care Revolution programme, that looks at social innovation,” says Director of Designability, Professor Nigel Harris.

Robotic housekeepers and carers may seem the stuff of science fiction, but with the number of men and women over 65 in the UK set to double in the next 20 years, we need to think about new ways to face the challenges. Fortunately for us, my researchers are leading the way.

Much of the research is in its early stages, and the biggest changes are yet to come, however Dr Cassandra Phoenix from my Department for Health thinks there is something we can all do now to look forward to a healthier and happier future: change the way we think about it.

“The negative perceptions of ageing are hugely problematic. They can support ageist attitudes, negatively impact on relationships with older adults and cause a deep anxiety about the future,” she explains.

“What's needed is much greater acknowledgement and awareness of the diverse ways that people grow older: wise, experienced and knowledgeable elders, volunteering, caring, running marathons, travelling, mentoring, creating, falling in love, pursuing new hobbies and continuing with old ones. As those birthday cards remind us, 60 is the new 40.”

Well that makes me 30, and I can't wait to find out what the next 30 years brings. Carpe diem! Now, that would make another great tattoo.



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ASK AN HONORARY GRADUATE

Quadruple graduate
Professor Kevin Edge

33

BATH'S BEST...

Corner of campus

34

THE GRADUATE

David Hancock: the
University's graduate #1

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ABBEY BIRTHDAY TO US

Celebrating our
golden anniversary

In 1982, over 600 students and staff created a half-mile long human chain to celebrate One World Week.

Buskers and mime artists performed, and music played across the Parade to encourage people to take part – *I Want to Hold Your Hand* by the Beatles was a favourite song choice for obvious reasons. As the chain broke down into a series of knots, laughter rang out across campus, and *Spike* reports the whole event ended in 'hearty applause'.

Were you there? Tell us by emailing alumni@bath.ac.uk



ASK AN HONORARY GRADUATE

Few people have played such an important role in the history of the University of Bath as **Professor Kevin Edge**.

Kevin was a student when our University was founded, an academic and Head of Department as our reputation in the UK grew, and Deputy Vice-Chancellor when we were named amongst the best the universities in the world. In the year he received his fourth degree (an honorary Doctor of Engineering) we talk to him about his time at Bath and how he owes his success to his wife (fellow honorary graduate Del).

What do you remember most from your time as a student?

I am tempted to answer, "If you remember the '60s, you weren't really there," but I don't think I can get away with that! A particular highlight was the move of my Department from Ashley Down in Bristol to Claverton Down – it was then that I truly felt that I was studying in a real university environment.

What made you want to pursue a research career?

After completing my PhD, I worked at Rolls Royce in Bristol. As with the majority of jobs in commercial environments, once a particular problem was solved, I moved on to the next task. I missed the opportunities that I had had in my doctoral research to explore issues in depth, and to seek to gain real understanding. In my subsequent career as an academic, I was able to re-engage with the wonderful world of discovery and knowledge creation.

Who inspired you?

One particular person comes to mind: Robert E (Bob) Koski, an industrialist and co-founder of the multi-national company Sun Hydraulics. A man, sadly no longer with us, who loved to debate and discuss almost any topic, and who never took the easy path.

What question in your field of research would you most like answered?

My research field was fluid power systems and their control, with a particular interest in noise generation and its reduction. I would like the answer to the question: "To what extent will it be possible to predict noise levels – in a sufficiently cost-effective manner – such that much quieter machines can be created at the design stage?"

Is there anyone you'd like to thank?

Many people – but I shall refrain from following in the footsteps of some Oscar-winners! The key people I sincerely thank are my parents, whose great support helped get me started, and my (long-suffering) wife, without whom I would have achieved far, far less.

What's the best thing to have happened to you at Bath?

The many opportunities that I was offered enabled me to pursue a hugely varied career that never failed to keep me enthused, engaged and stretched.

What piece of advice would you give to today's students?

Do something that I pretty much failed to do as an undergraduate: take full advantage of one or more of the extra-curricular activities that are on offer.

As an honorary graduate you're in good company. Is there one who particularly made an impression on you when you met?

As a music lover, meeting Joanna McGregor in 2008, when her Hon DMus was conferred, was particularly memorable. Her piano recital in 2015, at the formal opening of the Edge, was superb.

"My advice to students? Take full advantage of the extra-curricular activities on offer."



As a donor, why do you think it's important for alumni to give back to Bath and what impact does it have?

For those alumni who have attended a University Scholarship Reception, I really don't think it's necessary to answer this question. For those who haven't, I can honestly say that you only have to listen and talk to even a few of the students who have benefited from financial and other forms of support, to understand how this can transform their lives for the better and, in turn, how that may beneficially transform the lives of others.

What has been your proudest moment?

The award, last September, of an Honorary DEng from the University.

How do you relax?

Enjoying time with our two-year-old grandchild, Elena, who is an absolute delight. I also get particular pleasure from listening to (mostly classical) music.

What's your favourite place in Bath?

My wife and I enjoy trying out the many good and great restaurants in Bath, so my favourite place tends to change according to where we've most recently had a really fine meal.

What's your favourite joke?

I don't have a favourite joke, but this one recently came to my attention and raised a wry grin. Pre-flight announcement: "In the event of a sudden loss of cabin pressure, masks will descend from the panels above your seat. Stop screaming. Grab the mask, and pull it over your face. If you have a small child travelling with you, secure your mask before assisting with theirs. If you are travelling with more than one small child, pick your favourite."

Almost

500

honorary degrees have been awarded by the University since 1966.

More than

900

alumni, students, staff and friends joined Kevin to celebrate our 50th anniversary in Bath Abbey on 25 October.

Since our 50th anniversary year began, the University has awarded honorary degrees to:

David Parkin Professor of Chemistry **Professor Michele Aresta**; former First Vice-President of the European Commission **Baroness Ashton of Upholland**; co-creator of open source electronics platform Arduino **Professor Massimo Banzi**; economist **Professor Scott Barrett**; Senior Vice-President and Chief Economist of the World Bank **Professor Kaushik Basu**; Managing Partner for Talent at EY **Elizabeth Bingham OBE**; 2009 Formula One world champion **Jenson Button OBE**; World Cup-winning footballer **Sir Bobby Charlton CBE**; actor and writer **John Cleese**; wheelchair designer and founder of mobility charity Motivation **David Constantine MBE**;

chemist **Professor Robert Crabtree**; alumnus and former Deputy Vice-Chancellor **Professor Kevin Edge**; alumnus and former MP for Bath **Lord Foster of Bath**; neuroscientist **Professor Uta Frith**; alumnus and CEO of Sage **Stephen Kelly**; former EU Commissioner **Her Excellency Neelie Kroes**; former National Statistician **Dame Jil Matheson**; philanthropist and former Pro-Chancellor **David Medlock**; President and CEO of Humanity United **Dr Randall Newcomb**; alumnus and co-founder of the University Chamber Choir **Dr Michael Painting**; psychiatrist and pharmacologist **Professor David Nutt**; founder of Day Lewis Pharmacy the late **Kirit**

Patel MBE; CEO of Unilever **Paul Polman**; chemist **Professor Philip Power**; political historian and commentator **Sir Anthony Seldon**; alumnus and philanthropist **Roger Whorrod OBE**; philanthropist **Sue Whorrod**.



BATH'S BEST CORNER OF CAMPUS

Marianne Gros BSc Politics & International Relations 2017



The Students' Union is the first place I walk into every morning when I arrive at uni, and the last place I leave in the evening.

It's the heart and soul of our campus, from the coffee house music sessions to the vintage clothes sales and weekend warm ups. It's also the best place for the University's Student Media to showcase its work: while URB is putting on a morning show, filmmakers at Campus TV are busy editing footage of the latest RAG event.

As Editor-in-Chief of the students' newspaper *bathimpact*, I treasure this excitement because it means that my team will have lots to write about.

In between lectures, you'll find me in the Plug bar, enjoying a cup of coffee and taking it all in. I get to hear about what students love about being here, the problems they encounter and the incredible work they do to make our University even better. They're always the best inspiration for an article.

Once I have my story, the hard work happens in a narrow, newspaper-filled room in the SU: the *bathimpact* office. Anyone who walks past our door is likely to hear a debate about national politics or witness one of our designers going around in circles trying to find an original idea for the next front page.

With an issue printed every three weeks, life in the *bathimpact* office can get chaotic.

On a typical print week, the editorial team spends its evenings crammed together: four of us on computers finding pictures for features, while the rest of the team cosy up on the sofa and sub-edit articles. Everyone has their set of pages to design: News and Comment, Features, Sport, bite... we divide and conquer.

I'm usually pacing up and down, armed with a white board pen, trying to stay on top of everything. Is my editorial ready? Is it funny? Do the pictures all have credits? Are the international articles factually accurate? Are the pages in the right order? And let's not forget the adverts – this paper won't fund itself.

Every tick the clock makes is a step closer to Thursday's 4pm deadline. And yet, against all expectations, the paper is ready, proofread and prepped for the printers. Unfortunately, the celebrations are short lived. After a quick rest on the sofa and a feeble, but sincere, 'good work, team', we gather our things, lock the office door and head to class.

As I walk across campus and find a seat in a crowded lecture room, I find myself smiling. We did it. We found the story, we wrote the story, and we showed our fellow students that when they have something to say, *bathimpact* is their platform for expression. Isn't that what journalism is all about?



What was your favourite corner of campus?

“I recall a mix of feelings: joy, pride, a little bewilderment, gratitude, relief”

THE GRADUATE

To mark our 50th anniversary, and to celebrate welcoming our 100,000th graduate later this year, we talk to graduate #1: **David Hancocks**.

In 1967, Anne Bancroft's Mrs Robinson successfully seduced Dustin Hoffman as Benjamin Braddock in the Oscar-winning film *The Graduate*. A year earlier, an architecture student successfully completed a BSc in Architecture & Building Engineering to become the University's very first graduate – we don't know how many people were seduced in the process.

David, we'd like to know a little bit about you for our files. (We promise to keep *The Graduate* references to a minimum.)

Ironically, in 1967 I was queuing for that movie and saw a fellow University of Bath architecture graduate who had moved to study in London. I got chatting to him and his girlfriend, who later became my first wife.

When did you find out that you'd be our first graduate?

Not until they announced my name to go up on stage. The student degrees were presented by discipline, alphabetically, so they started with Architecture. They began with the Honours degrees, and my name spelling put me first in that group.

What does it mean to be graduate #1?

Apart from the very large cheque the University kindly sends me each year*, the luck of being the first graduate is a lovely reminder of how fortunate I was to be at the University of Bath anyway.

What do you remember most from that day?

I recall a contradictory mix of feelings: joy, pride, a little bewilderment, gratitude, relief, but surprisingly little active celebration: no large contingent of parents, no crowds of excited students with flowers and cameras (and no selfies).

After the ceremony in The Pump Room, a small group of us went to a café across the courtyard.

Have you been following the progress of your alma mater? What do you think are the biggest differences between then and now?

My University's climb to great heights in so many disciplines delights me. When I attended, the Architecture School was near Clifton, in Kings Weston House: a 1719 Vanbrugh building with extensive parkland. We missed the benefits of campus life but enjoyed many other advantages.

I did not move to Bath until 1970, when I was fortunate to live in the Royal Crescent. (There's posh, look you!)

You've had a successful career in planning and exhibit design for zoos, botanical gardens and natural history museums. What drew you to this area and what are you most proud of?

I knew nothing of zoos, and went to work at London Zoo expecting to learn to design for behavioural needs. But their architects focused instead on style. I set out to change that mindset. My 1971 book, *Animals and Architecture*, led me to become planner and then director of the Seattle Zoo, where we introduced a new concept for zoo design.

My 2001 book on zoos, *A Different Nature*, was shortlisted for the *Los Angeles Times* Science Book of the Year.

You've written a lot about animal well-being. Do you think zoos have a future, and if so what will they look like?

Zoos are not evolving, have swallowed their own propaganda about being crucial for conservation, and need to make fundamental changes to become useful natural history institutions.

To have a relevant and useful future, zoos will need to be mindful of working within their own biome, consider all of Nature not just animals, and create environments as close as possible to wilderness habitats.

Should we mention the elephant in the room?

I'm especially concerned about elephants. In 2009, I co-authored and co-edited *An Elephant In The Room: The Science and Well-Being of Elephants in Captivity*. I think it's almost impossible to meet their psychological, behavioral, social, emotional and physical needs in a zoo. The same is also true for all marine mammals.

Conservation is clearly very important to you. How does planning and exhibit design help people better understand and appreciate the natural world?

'Nature is the norm' is an axiom that most zoos ignore. Exhibits must not only look but also feel convincingly natural for animals as well as visitors. The focus on big animals is not good or necessary. Attention instead should be on developing respect for all of Nature, and revealing interconnectedness of diverse plant and animal species.

Do you have a birthday message for the University?

Congratulations on the impressive accomplishments of the past 50 years, and best wishes for continuing that trend for the next 50.

Worldwide we face a challenging future, and today's students will play a vital part in finding our way to a healthier society and safer planet for all living things (except mosquitoes, and maybe hagfish).

We'll welcome graduate number 100,000 later this year. Do you have any advice for him or her?

The most important role we each play in life is to ensure the world is in some way better than when we arrived.

*Ed: Please don't write in requesting your cheque.

ABBEY BIRTHDAY TO US!

Students, staff, alumni and friends came from around the world to celebrate our **golden anniversary** on Tuesday 25 October.

25 October is not only a special day for us, it's also special for more than 300 of our alumni. We sent everyone we shared a birthday with a special anniversary duck card, and wished them all a 'quacking day'.



Here's a few of our favourite birthday buddies enjoying their big day.



1 Guests enjoyed performances, music and dance in Bath Abbey.
2 POP: our Party on the Parade for students and staff.
3 Our Chancellor, HRH The Prince Edward, The Earl of Wessex, cuts the birthday cake.

4 Honorary graduate, and long-time supporter of our University, Sue Whorrod, who shares a birthday with us.
5 The University's men's 1st XV rugby union team faced Leeds Beckett in the new BUCS Super Rugby league. We won, of course.

6 A happy, if slightly nervous-looking, Rob Smalldon.
7 Shun Ting Leung and her family enjoying birthday sushi in Hong Kong.
8 Feliz Cumpeaños to Hin Wing (William) Sing.

9 Cards and cake for Christine Leake (née Biles).
10 Carys Nathoo (née James) with her son Osian getting ready to blow out the candles.
11 Guy Davies and friend at his birthday/Halloween party.



While our big day may be over, the celebrations are set to continue, including a very special alumni reunion on 6 May. We hope to see you there.

PUT ON YOUR PARTY HAT!
IT'S OUR BIGGEST EVER REUNION



SATURDAY
6 MAY

VISIT 50YEARS.BATH.AC.UK TO BOOK YOUR PLACE

PART OF THE

