04 / NEWS Events, breakthroughs and milestones at Sussex.

12 / PEOPLE Comedian Sara Pascoe, Small Batch Coffee duo Alan and Nick, Everest climber Jayanthi and windmill engineer James.

26 / FEATURES A closer look at Brexit, mental health and water security.

39 / FORWARD AND BACK Remembering Sussex ‘greats’ and student digs, celebrating those who go the extra mile, recent authors and an alumni competition.
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Welcome

Sussex is different. Since our foundation in 1961 we’ve valued – and encouraged – a pioneering spirit.

As universities change and the world around us changes, we continue to challenge, question and engage with local, national and global issues through our research and our teaching.

We also celebrate the achievements of members within our impressive community of alumni and friends for whom intellectual curiosity lasts a lifetime.

In this year’s Falmer magazine, we’re proud to highlight pioneers, such as Jayanthi Kuru-Utumpala, Sri Lanka’s first person to climb Everest, alongside features on our leading research and the latest University and alumni news.

Paying tribute to two Sussex greats, former students share their memories of Lord Asa Briggs and Professor Sir Harry Kroto.

Did you live at East Slope? Read the memories alumni have already revealed and hear how two friends who met in Flat 28 now run a successful coffee roastery and café chain.

I hope you enjoy your new-look magazine – we’d love to hear what you think of it and receive your news, photos and ideas for the next edition. So do get in touch!

Sally Atkinson, Editor
Falmer Magazine

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UP FRONT

04 UNIVERSITY NEWS Keeping abreast of Sussex developments taking place on campus and around the world. 08 UNIVERSITY Q&A Our new Vice-Chancellor Adam Tickell on today’s challenges and Sussex’s future. 10 ATTENBOROUGH CENTRE FOR THE CREATIVE ARTS Refurbished and delivering world-class performances.

12 SARA PASCOE Comedian, author and reluctant role model. 16 JAYANTHI KURU-UTUMPALA The first Sri-Lankan to climb Everest reveals what it’s like to reach the top, as a woman.
19 ALAN TOMLINS AND NICK BARLOW A trip down memory lane for the East Slope flatmates turned Small Batch coffee gurus. 22 JAMES TASKER An interview with the engineer who rebuilt Ashcombe Windmill, 100 years after it was destroyed in a storm. 24 ALUMNI NEWS Career milestones, sporting success, awards and reunions.

26 MIND MATTERS Professor John Atack explains how the Sussex Drug Discovery Centre has established itself as the UK’s only centre pursuing drug discovery for mental health disorders. 30 BUILDING A BETTER BREXIT The UK Trade Policy Observatory addresses the complexity of uncoupling the UK from the EU, in the wake of Brexit. 33 RESEARCH NEWS The latest in pioneering research and scientific achievements from the University. 36 WATER FOR ALL Professor Martin Todd hones in on the pressing need for groundwater management in Africa.

39 GIFT OF TIME Meet alumni who are making a difference to current students’ lives. 42 MAKING THE FUTURE Looking at the impact of the University’s 50th Anniversary campaign. 42 ALUMNI MEMORIES After years as the archetypal student digs, we bid a fond farewell to East Slope. 44 SUSSEX ICONS The late, great, Lord Asa Briggs and Sir Harry Kroto are fondly remembered. 47 BOOKSHELF An eclectic selection of books written by alumni. 48 COMPETITION Win a 4-star weekend in Brighton.
News in Brief

Sussex and Hong Kong universities to launch dual PhD

A dual PhD in CANCER SCIENCE, jointly run by scientists from Hong Kong University of Science and Technology, one of the world’s top 50 universities, and the Genome Damage and Stability Centre at Sussex, is due to commence in 2018.

All together now

Professor of Music Ed Hughes and his team have developed an app that HELPS PRIMARY SCHOOL CHILDREN PLAY MUSIC at the same speed and rhythm as each other. Professor Hughes said: “I love how it can really help take the fear factor out of playing in an ensemble for children. The improvement in confidence can be amazing.”

Syrian refugees arrive at Sussex

The first SYRIAN REFUGEE SCHOLARS to arrive on campus have started their English language courses. The University has extended the reach of its Refugee Scholarship, made possible by the generous support of Sussex alumni and friends. Changes include making the scheme open for students wishing to continue further study or work, and opening it to refugees in the Sussex area who have expert knowledge.

Sussex Masters course in Corruption launches in Qatar

The PRIME MINISTER OF QATAR has launched a two-year Sussex MA in Corruption, Law and Governance, in collaboration with the Rule of Law & Anti-Corruption Centre. Professor Dan Hughes, Director of the Sussex Centre for the Study of Corruption, said it is “the perfect vehicle for professionals across the Gulf region to gain in-depth knowledge of the fight against corruption.”

Construction to start on new ‘East Slope’

The first phase of CONSTRUCTION ON NEW EAST SLOPE ACCOMMODATION, which will house 2,100 students and a new Student’s Union, is expected to finish by Autumn 2018, with all work completed by 2020. A ‘fazeenell bash’ is being held on 24 June 2017 at East Slope Bar for any alumni wanting to see their old accommodation before its planned demolition.

Record numbers volunteer for Sussex Runs to Prevent Podo

On 9 April 2017, over 100 Sussex alumni, staff and students will run in the Brighton Marathon and BM10k in our largest ever community fundraising event in support of world-leading research into podoconiosis (podo). Thank you to everyone who is helping us reach our £50,000 target. Find out more and add your support at www.sussex.ac.uk/PreventingPodo
Writivism: Nurturing Africa’s future writers

Writivism is a pan-African initiative designed to seek out and nurture emerging literary talent across the continent. The School of English, the Sussex African Centre and the International Office at Sussex were official funding and programme partners for Writivism 2016, the fourth annual festival.

In addition to the sponsorship of the Short Story Prize, Sussex also supports such initiatives as the #WriteINGamesNG in partnership with Goal.com to show how writing and sports can promote individual and national development, as well as the University of Sussex/Uniserv Education Essay Competition, where students at Kenyan independent high schools were invited to compose pieces addressing the value of an international education.

Dr John Masterson, lecturer in World Literatures in the School of English, played a key role in the festival during his visit to Kampala, Uganda in August 2016.

Student's award-winning graphene battery could slash electric-car charging times

Josh de Wit, a second-year Mechanical Engineering student, has won a national car industry award for designing a new battery that could revolutionise electric vehicles.

The 21-year-old’s concept uses an innovative graphene battery that reduces cost, weight, storage capacity and size, as well as maximises efficiency.

He is also working with the Sussex Innovation Centre to develop a prototype and bring his concept to market.

Remarkable people honoured at summer graduation

A folk heroine, an historical novelist, a policy and diversity advisor, and a leading South African judge are among the 30 remarkable people who received honorary degrees at last summer’s University of Sussex graduation ceremony.

Shirley Collins MBE, Dr Philippa Gregory (History 1975), Baroness Lola Young OBE, and Justice Edwin Cameron delivered moving and inspirational speeches to a record number of graduates.

Chancellor Sanjeev Bhaskar OBE said: “It is always such an honour to meet those who have been recognised for excellence. Their stories are always inspiring and humbling, and remind us that truly great achievements involve determination and endurance as much as brilliance.”

Double win for ground-breaking dementia project

Brighton and Sussex Medical School’s Time for Dementia project won two major national awards in November 2016. Professor Sabine Barnetv-MBE, Director of Time for Dementia, and her team received the award for ‘Innovations and Leaders: Excellence in Training’ at The LangBuisson Awards 2016. The prestigious awards celebrate industry excellence and innovative UK health and care services for the public, private and third sectors.

#WritingGamesNG comes to Brighton

The Universities of Sussex and Brighton will co-host the British Science Festival, which will run from 5-9 September 2017. The annual event was last held in the city in 1983 and this year will comprise more than 100 events, specially curated by the British Science Association in partnership with the Universities.

Visitors can expect to find talks, debates, workshops and performances about cutting-edge science from leading academics. Topics will cover the scientific spectrum including technology, engineering, and social sciences.

Professor Michael Davies, Pro-Vice-Chancellor (Research) at the University of Sussex, said: “We are thrilled to welcome the British Science Festival back to our city.

“Collaboration sits at the heart of our approach to scientific discovery and impact through combining disciplines, working with a wide range of partners and most importantly, engaging and encouraging brilliant minds to be involved. We look forward to a fantastic festival in September 2017.”

Plans underway for new Life Sciences building

A new Life Sciences building is soon to commence building at the University of Sussex. Intended to be in keeping with the original vision of the University’s founding architect, Sir Basil Spence, it is due to include the distinctive use of glass, concrete and brick that we’re all familiar with.

Designed by Hawkins/Brown Architects, the new development is set over five floors, built using the very latest sustainable materials, and will include collaborative spaces for staff and students to work in.

Head of Life Sciences, Professor Laurence Pearl, said: “Sciences is a team activity. If you can bring people from different disciplines together in an open, flexible laboratory structure – the ecologist, the neuroscientist, the drug discoverer and the cancer biologist – they can learn from one another and phenomenal things can happen.”

The building’s modern laboratories will provide high-tech teaching spaces for students and will also include a new Bio-Innovation Centre, which will be a hub for growing bio-medical businesses, and in turn strengthen the University’s partnerships with industry, creating more jobs in the region.
The new Vice-Chancellor, Professor Adam Tickell, speaks candidly about the current challenges and opportunities for Sussex, and the integral role played by the University’s lifelong alumni.

A vision for Sussex

Q1 Vice-Chancellor, what attracted you to Sussex?
I was very happy in my previous job and not looking to move. However, when the opportunity at the University of Sussex came along, it was too good to pass by. Sussex has a history characterised by challenging conventional wisdom as to how universities should be and a strong shared-values commitment. I felt that my background – as an academic, university leader and as a person – dovetailed well with the University.

Q2 What areas do you think particularly stand out as the University’s main strengths?
It’s almost impossible to answer this without missing out much of our excellence. We provide an outstanding education; provide sector-leading support for students from non-traditional backgrounds – and then provide opportunities few other universities can match; are in the top echelon for getting our graduates into graduate jobs and further study; and have world-leading research in areas of the sciences, humanities and social sciences. Examples include our researchers in genomics, quantum physics, international development, history, English, neuroscience, science policy and so on.
Just to list these, however, is to miss out many other brilliant academics.

Q3 In the current political and economic climate, what do you consider to be the main challenges and opportunities for Sussex?
A vision for Sussex

Q4 Sussex students have always been passionate in speaking out and campaigning for causes they believe in. What’s your approach to activism on campus and beyond?
I strongly believe that university is a place where students should explore ideas and develop themselves. Sometimes that plays through as activism and, whilst more vocal and visible forms of this aren’t always comfortable, they are as much a part of university life as our sports teams, religious groups and social societies. I hold regular ‘open office’ sessions in the Students’ Union so that students understand that they don’t need to shout to be heard. For me, though, there is a quid pro quo: I believe that students of all political persuasions need to be respectful of each other and sometimes people forget that there is a full spectrum of opinions among our student body.

Q5 In your view, what is the role of alumni?
A degree isn’t simply transactional or academic – it is the start of a lifelong emotional relationship with the University. Sussex alumni are an integral part of the University’s family and I genuinely enjoy meeting with, and hearing from, them. Our alumni help us in a myriad of ways: working with students, advising us on what we are doing well (and badly), and – of course – through philanthropic support for our students and our research.

Q6 How do you see the role of the University within the local community?
There is already a lot of excellent engagement with our local community, including arts activities through the Attenborough Centre for the Creative Arts, student volunteering, and free legal clinics for local residents. However, Sussex has engaged less with our neighbours in Brighton and Hove and in East Sussex over the past couple of decades than we might have done. As local authorities feel a real financial squeeze, we are talking with both councils about how we can work with them to ensure that our city and surrounding towns and villages can continue to thrive during a period of austerity. We will be trialling a ‘Community Day’ in June where we will invite our neighbours onto campus to show them that we are not only the University of Sussex, but we are also a university for Sussex.

Q7 What is your vision for Sussex?
I am working on refreshing the University’s strategy and have invited alumni to make their views known, so my vision remains embryonic. However, I am convinced that we need to be mindful of the legacy that our pioneering founders – Lord Asa Briggs, Lord John Fulton and Professor John Maynard Smith amongst others – bequeathed us, but reinvent that spirit of intellectual enquiry and pedagogic innovation and excellence in a context that is very different (and more challenging).

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Now in its second season showcasing an eclectic programme of music, performance and film, the refurbished Attenborough Centre for the Creative Arts (ACCA) is on course to thrill.

ACCA’s got talent!

Nearly a year after opening, the newly-refurbished Attenborough Centre for the Creative Arts (ACCA) has wasted no time in building a reputation as a cutting-edge interdisciplinary arts hub, both on campus and in the local community.

Professor Michael Attenborough, CEO (ENGAM 1969), said: “The Centre is a stunning tribute to my dad. I can tell you he would have been delighted with the final result.”

April saw the arrival of a Steinway piano, a generous gift from alumni Tony Banks (MAPS 1968), composer and member of rock group Genesis. Tony Banks (MAPS 1968), composer and member of rock group Genesis.

Michael Attenborough, CEO (ENGAM 1969), said: “The Centre is a stunning tribute to my dad. He was extremely touched when the University announced that the Centre was to be renovated and renamed last year in tribute to Lord Richard Attenborough, the University’s former Chancellor, and his family, thanks in part to a host of generous donations from alumni and friends."

After a nine-year period of renovation, it was re-opened and re-named last year in tribute to Lord Richard Attenborough, the University’s former Chancellor, and his family, thanks in part to a host of generous donations from alumni and friends.

The Grade II listed building will be remembered by many alumni as the Gardner Arts Centre, which played a central role in Sussex students’ life right from its inception in 1969.

After a nine-year period of renovation, it was re-opened and re-named last year in tribute to Lord Richard Attenborough, the University’s former Chancellor, and his family, thanks in part to a host of generous donations from alumni and friends.

ACCA has co-commissioned a new work for Spring 2017 by interdisciplinary artist Shelia Ghahreman. ‘Superner’ (April 6), a poetic and choreographic ensemble performance, considers the history and mythology of the element, its role within industry and climate change and its existence within our own bodies.

The Centre is a stunning tribute to my dad. I can tell you he would have been delighted with the final result.

Families can visit ACCA during the Easter holidays. Lone Teei’s interactive experience for children, Beastie, comes to ACCA for the Spring break (10-12 April). It’s an innovative participatory performance for those aged 6-10.

ACCA is also pleased to be partnering with Brighton Festival as a co-producer on multiple events for the 2017 edition. The venue will host a wide range of international dance, theatre, debate and poetry during May.

Laura McDermott, ACCA’s Creative Director, has been busy building partnerships with local organisations such as Brighton Digital Festival, CINECITY and South East Dance. This collaborative spirit will be central to ACCA’s ethos as it seeks to support the development of emerging artists and facilitate a variety of community-led projects in the future.

Alongside colleagues in Developmental Psychology, Laura has joined discussions around Our Future City, a major city-wide initiative in Brighton & Hove, focused on utilising culture and the arts to transform the city and increase creative opportunities and positive life outcomes for children and young people.

So, what’s next? 2017 kicks off with SIC! Festival, a multi-disciplinary arts programme looking at the physical, mental and social challenges of life. Festival highlights include Before I Die, a public participatory art project by Taiwanese-American artist Cindy Chang asking people to contemplate life, death and personal aspirations, and #negrophobia, a piece in which American curator and artist Jaamil Olawale Kosoko examines the erotic fear of the Black body.

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The UK premiere of Forced Entertainment’s Real Magic and Complicite’s trip into the depths of the Amazon, The Encounter, were just some of the highlights from a pioneering first year.

Music fans were treated to performances from ‘folktronica’ trailblazers Beth Orton and Mercury Prize-nominated experimental jazz trio GoGo Penguin, while filmaker and honorary graduate Andrea Arnold OBE gave students valuable insights into film direction during a masterclass in June.

Sussex academics showed off their research to staff, students and members of the public in a series of dynamic, TED-style talks during the first Making the Future day.

Laura McDermott commented: “We received such a warm reception for our autumn season and we’re keenly excited to continue building on that with new partnerships and wonderful experiences for our audiences. This season we’re particularly proud of our partnership with SIC! Festival, bringing you world-class international performances, installations and panel discussions. The rest of the programme is also packed with truly diverse and unique art – from kinetic sculptures to performances on headphones, to an interactive adventure for kids. We look forward to welcoming you back – or for your first visit – with us this spring.”

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“After a nine-year period of renovation, it was re-opened and re-named last year in tribute to Lord Richard Attenborough, the University’s former Chancellor, and his family, thanks in part to a host of generous donations from alumni and friends.”
I was working in Nottingham in a hotel and I was earning £100 a week as a backing singer for Robbie Williams’ dad, and I came up with this master plan to get a student loan. That would be enough to pay off my overdraft and then I could leave this job that I hated. I applied through clearing and, because I had an A in English, I was accepted onto an English course at the University of Sussex. It was only afterwards that I realised it was a really brilliant course. I’ve always been so poor, so it seemed like such a scam on the government that they lent me money to go to university, which I thought I would never be able to pay back. I banked the cheque and, obviously, it was going to take a week to clear, so I thought, ‘Well, do you know what, I do like books so I’ll go to one of these lectures’. It was just an introductory lecture to English literature and I was like, ‘Oh my God, I’m going to do this degree’. It was all accidental.

I met my two best friends, Cariad and Vanessa, in my first term, in a rehearsal for a production of Our Country’s Good by Timberlake Wertenbaker. I just thought they were the most brilliant women. Cariad is a comedian like me, and Vanessa is doing stand-up and acting. We loved it because we performed all the plays in venues like the Hot House, the Debating Chamber and the Gardner Arts Centre; there were lots of performance spaces.
I was very serious about theatre. I always thought comedy was stupid. I hated it. There are loads of plays that I really love to read but I saw the worst theatre of my life at Sussex – and created some of it. I remember, occasionally, there was a comedy night, people would go and I was just like, ‘Why do you want to be shouted at by white men?’

Nothing is as hard as writing a dissertation. There’s so much self-doubt, it feels so important. Your life is more confusing then because it’s the first time that you have to motivate yourself. Writing a book is a lot easier because you can only do as much as you can that day and you can move deadlines. You can’t do that at university. The night after I handed my book in and everything was done, I remember having a beer with some comedians in Soho Theatre and thinking I’ll never feel happier than this. It was the first night for a year I’d been out not thinking, ‘Why are you out drinking? You’ve got to get up tomorrow at 5am to write’.

Sussex was the first time I’d come across activism. I come from a very working class background where people might moan about the news or they might hate Margaret Thatcher, but that’s kind of it. There were die-ins for Syria and people were painting themselves red and lying down in Library Square. Obviously, as a drama student, I was very much into it, but I didn’t understand why. Because I didn’t know anything about anything, quite often I’d find myself in the Students’ Union bar being lectured by someone from the year above. I didn’t know who the politicians were and I didn’t want to appear stupid. I just stayed really quiet!

I did queer theory as one of my electives in my first year and that was a great building block. That’s when I found out about things like boycott and social movements and oppression leading to something positive. So, I did understand things a lot better when I left. I read The Badger and I tried to catch up with everyone else, but I wasn’t all political.

Stand-up is liberating because there’s a prescribed place for it. Everyone has their allocated time and people give you the benefit of the doubt for however long that time is. It is incredible because you get to work out what you think about stuff. That could be huge issues, such as what you think about socialism or Donald Trump, but mostly it’s things like ‘What do I think about the fact that robots are doing our jobs in Sainsbury’s now?’ or ‘What do I think about my relationship with my dad?’. It focuses your thoughts and, with comedy, you kind of manipulate that because you’re trying to be foppish or surprising. In a way, stand-up gave my life such structure that everyone else is trying to work out what you think about stuff. It was the first night for a year I’d been out not thinking, ‘Why are you out drinking? You’ve got to get up tomorrow at 5am to write’.

You click into a kind of survival mode once you’re up there in front of everyone and afterwards you just feel exhilarated, which is a wonderful feeling.

There are some women in comedy who are bored of talking about gender. I do still find it interesting because I’m 51 per cent of the population essentially, but I have a job in which I’m considered a subculture – but I don’t feel like one.

I hadn’t watched much comedy when I began performing. I thought stand-up was improvised. I found out not long before starting out that you’re allowed to write it down and work out what you want to say, I’d seen Jack Dee, Harry Hill and Billy Connolly on TV and I thought they were all improving; I thought you had to be a genius. When I went to an open mic in 2006 and saw all of these boys holding pads with notes in them, I thought, ‘Are you allowed to take notes up with you?’ I discovered all of my heroes after starting out, which is good in a way because people tend to emulate the person they think is the funniest and through that they find their own voice.

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I hadn’t watched much comedy when I began performing. I thought stand-up was improvised. I found out not long before starting out that you’re allowed to write it down and work out what you want to say, I’d seen Jack Dee, Harry Hill and Billy Connolly on TV and I thought they were all improving; I thought you had to be a genius. When I went to an open mic in 2006 and saw all of these boys holding pads with notes in them, I thought, ‘Are you allowed to take notes up with you?’ I discovered all of my heroes after starting out, which is good in a way because people tend to emulate the person they think is the funniest and through that they find their own voice.

In a lot of the discussions that we’re currently having, there’s this binary thing of right and left and everyone thinks they’re good and so-and-so is bad. With Brexit, for example, there are a lot of people who disagree with each other but think they’re the only ones trying to do good. But it’s not that, it’s two sides who disagree on how to do good. People shouldn’t see themselves as role models. If I make a terrible mess of my life, I wouldn’t then want to think, ‘Oh, I was a bad role model’. All you really want to show children is to be brave and to be kind. I feel that, at present, our society isn’t very generative for people who don’t have their own kids to take care of. Something that’s quite nice about my job is occasionally getting to do workshops in schools, and I think there should be more of that. There should be sharing so that everything isn’t left to schools and parents. Every young person should have access to a range of people and be able to see that adults care. Youngsters are everyone’s future, whether they’re someone’s genetic relation or not.

I deal with criticism very badly. I thought I’d get better at it, I thought I’d harden. I’ve stopped going on the internet because I get too sad and I spend all day arguing with a stranger in my head. My book is very well reviewed on Amazon, I’ve got loads of five-star reviews, it’s great. But there are some one-star reviews too. I haven’t read them, but when you’ve spent a year of your life on something, you think, ‘Mate, one star is like I didn’t spellcheck it, come on’.

There are some women in comedy who are bored of talking about gender. I do still find it interesting because I’m 51 per cent of the population essentially, but I have a job in which I’m considered a subculture – but I don’t feel like one. I think it is already getting a lot better. It’s always been said that you can’t be it, if you can’t see it. Because they’re putting more women on TV, that instantly means that now 13-year-old girls can say to their parents, “I’m going to be a comic”. They won’t respond with, “You can’t, there’s Jo Brand, that’s it.” Instead they’ll say, “Yes, you can, there’s loads of them and you can be young and you can be attractive.” I think it will change, but I still think that maybe we’ll all have to talk about it a little bit more.
It was during my time at Sussex that I sharpened my skills in rock climbing, particularly after I joined Vertigirls – a women’s climbing club in Brighton.

Whenever I had writers’ block and couldn’t complete an assignment, a full day of climbing with the Vertigirls would help me to complete my assignments on time.

Climbing Mount Everest was a childhood dream and something I wanted to do since I was about six or seven-years-old. It was not something I vocalised as I was worried that people would think I was mad! My friends and family were supportive when I told them I was going to do it as they knew I was crazy about mountains and rock climbing. There were some friends who thought it was a crazy idea, but they didn’t tell me until I was back safe and sound!

I had already worked with the Sri Lankan women’s movement for four years before I came to the University of Sussex. My Gender Studies MA provided me with the theoretical aspects, which were almost like the missing pieces of a jigsaw puzzle. I’m going to sound like a nerd, but I loved the library very much – especially as it had such a wide variety of books on queer theory.

It was love at first sight when I got to Sussex. I was lucky to get accommodation at Stanmer Court, across the road from campus and next to Falmer train station, which was just a perfect location. I loved Brighton because it was not a big city. I’m an outdoorsy person and I loved the rolling hills and the pebbly beach on long summer days.

There were many academics who inspired me. Professor Sally Munt was my dissertation supervisor and I was introduced to Professor Andrea Cornwall by a women’s rights activist from Sri Lanka. I deeply respect and admire them both very much.

On 21 May 2016, women’s rights activist Jayanthi Kuru-Utumpala (Gender Studies 2008) became the first Sri Lankan to summit Mount Everest. Here she tells Tom Furnival-Adams about the road less travelled.

**Life without limits**

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On 21 May 2016, women’s rights activist Jayanthi Kuru-Utumpala (Gender Studies 2008) became the first Sri Lankan to summit Mount Everest. Here she tells Tom Furnival-Adams about the road less travelled.
Preparation for the climb took five years. It began in 2011 and included summiting two other high-altitude peaks with my climbing partner Johann Peiris: Island Peak in the Himalayas of eastern Nepal in 2012, and Mount Kilimanjaro in 2014. In 2015 we intensified our training by following a strict regime that included interval training, core strengthening, cardio and stretches. We had to be as fit as we could ever be. In 2003 and 2004 I completed two month-long courses in Basic and Advanced Mountaineering from the Himalayan Mountaineering Institute in Darjeeling, India. I never imagined I would climb Everest one day, but everything I learned during those courses came into use when I was 8,000 metres above sea level.

The first thing I did when I reached the summit of Everest was hug my Sherpa, Ang Karma. I thanked him, as I would never have made it to the top without his guidance. It was a surreal experience and to this day I sometimes wonder, “Did I really climb Everest?”.

I was fortunate to reach the summit at 5am, just as the sun was rising. I was above the clouds and had the same view you would have if you looked out of a plane window – the only difference was that my feet were on the ground. It was just amazing.

There are different pressures on female climbers, for biological and physiological reasons. Due to the extremely cold temperatures beyond Everest Base Camp, everyone was advised to urinate into a wide-mouthed water bottle, which was designated as the pee bottle. For obvious reasons, the girls would always say that it was easier for the boys to pee into a bottle. I also had to deal with menstruating on the mountain, despite taking a contraceptive pill, which failed due to the high altitude; that was a challenge in itself.

The biggest lesson I learned was to think positively. If you believe in yourself and put your mind to it, you can make the impossible possible. It’s all in the mind, and our minds have the power to change things.

I would love to build an indoor rock climbing gym in Sri Lanka as we don’t have one yet. I want to promote rock climbing in my home country as I think it’s one of the best sports in the world, not only to stay fit, but also to build self-confidence. I will keep climbing mountains, as each adventure offers a new learning experience.

Becoming the first Sri Lankan to climb Everest has meant that I am now able to use my experience as a public platform to talk about gender equality and women’s rights. I have been working as a women’s rights activist for 14 years, and mountaineering and gender equality have been the two things I have been most passionate about since my early 20s.

My advice for aspiring women’s rights activists would be to stand up for what you believe in and don’t let anyone tell you that you cannot do something because of your gender. Most of all, never give up – small incremental changes are sometimes more important than big dramatic changes.

It’s 16 years since former flatmates Alan Tomlins (American Studies 2001) and Nick Barlow (History 2001) first met in Flat 28, East Slope, but their enthusiasm for the place is contagious as they bound up the narrow steps to see if they can spot what has changed in the intervening years. Not much by the look of it, although their old dining table is not there, much to Alan’s disappointment: “It had a long birthday message to me on the underneath,” he reveals.

Memories come flooding back as Nick remembers how quickly everyone got to know one another, partly thanks to their flat having the only microwave in the block. Alan loved the “party central” nature of the accommodation: “You felt like you were right in the centre of everything, and everyone else would always gravitate towards East Slope.”

In conversation

Mighty roasteries from little coffee beans grow, as Sally Atkinson discovers when she takes a trip down memory lane with the entrepreneurial duo at Small Batch.
Starting out as a small coffee roastery in Goldstone Villas, Hove, Small Batch was Brad’s brainchild, with Alan investing time and working for free in the early days as he learned the art of roasting and the business of producing a quality cup of coffee. “There wasn’t much training around in those days; you had to learn everything on the job,” he says.

The roastery soon led to a small café, and today they source and roast around 100 tonnes of beans a year to supply their own outlets, as well as 200 business customers, including 50 Brighton wholesalers.

Alan is quick to point out that they were lucky in the timing of setting up – just before the coffee boom – as well as with trailer-hiring their operation in Brighton, the ‘coffee capital of the UK’, where locals consume more coffee per head than anywhere else in the country, according to research by Greggs and the University of Stirling.

But the first outlet opened just as the recession hit and there have been a lot of early starts and seven-day weekends to build the business from a small friends-and-family outfit to one with eight outlets and over 100 employees.

Now Head of Marketing and Digital at Small Batch, Nick’s face will be familiar to many commuters who have stopped for a brew at the Brighton train station café over the years. Working at the sharp end for so long hasn’t dimmed his enthusiasm for creating a fun and friendly work environment for both customers and staff. “We want to be profitable and grow and be successful, but you also want the day to be fun.”

From ‘boozy’ Christmas parties and pub quizzes to the more serious business of training and catalysing ambitious staff to grow within the business, Small Batch has managed to retain many of its staff from the early days, often through the fast-paced hospitality sector.

Both Nick and Alan got involved in the ‘coping’ tasting sessions with the rest of the staff and describe the process as being incredibly intense as enroscipers take in a full sip of coffee before expressing it into the nearest spittoon.

Similarities with the wine industry are evident, and Nick can’t resist asking Alan about the description or one of their coffee bean batches: “A syncope, jammy body gives way to tones of blueberry and blackberry acidity and then a sweet cinnamon finish.”

Yorkshireman is almost tempted to play down his enthusiasm for creating a fun and friendly work environment, with a kind of ‘I’ve got more important things to worry about, I can’t resist asking Alan about the description or one of their coffee bean batches: “A syncope, jammy body gives way to tones of blueberry and blackberry acidity and then a sweet cinnamon finish.”

He goes on to explain why the quality of Ethiopian coffee is so good; how over the years the coffee bushes have cross-bred to create a high diversity of fruit: “They just have these huge diversity of fruit: “They just have these crazy, intense flavours that you can’t get from coffee anywhere else in the world.”

Ethiopia is also at the forefront of our minds thanks to Professor Gail Davey’s work on the prevention and treatment of podoconiosis, a debilitating form of elephantiasis affecting the feet and legs. Small Batch already supports a number of good causes, including fellow alumni Lisa Herriot’s anti-bullying charity Ohlala, and now Alan and Nick plan to get involved in supporting Gail’s work too.

Outsiders are still to be finalised, but at the time of going to print, they are working on a special Ethiopian ‘coffee of the month’ to go on sale in all Small Batch outlets (and online) with a donation going to the cause. They are also throwing their weight behind our Sussex community who are running the Brighton Marathon and Triathlon in April by providing them with a quality cuppa as they cross the finish line to support the Sussex Run to Prevent Podo tent.

Not all memories are easy, however. Alan’s mountain-biking through Stammer Park woods was curtailed halfway through the first year when his bike got stolen, and Nick remembers a “pretty gnarly” flat with “gives of washing-up”.

As we stand in the bright winter sunshine with Brad Jacobsen.

“The coffee industry is a very diverse industry, and it’s the right place to be if you’re interested in the business of producing a quality cup of coffee. There wasn’t much training around in those days; you had to learn everything on the job.”

Over the years you build up a library of flavours, recognising what you’ve tasted in coffee – it’s just learning the language really and interpreting it.

For more information on how to help Sussex Runs to Prevent Podo reach its collective target of £30,000, visit: WWW.SMALLBATCHCOFFEE.CO.UK

And you can read more about Small Batch at: WWW.SMALLBATCHCOFFEE.CO.UK
Once a wind-powered corn mill overlooking the South Downs, Ashcombe Mill’s reconstructed traditional six-sweeps are soon to be converting Sussex sea breeze into electrical energy, thanks to former engineering student James Tasker (ENGG 1969).

Winds of change

My lifetime career is as a structural engineer with the same company, but my interest in windmills was ignited early on. Whilst working as a young engineer on the new indoor pool at the King Alfred Leisure Centre for Hove Borough Council they asked for steel stocks (arms that support the sails) to be designed for West Blatchington Windmill. I particularly liked the idea of a structure that could move as I had studied Mechanical Engineering at the University of Sussex before going on to read Structural Engineering as a postgraduate at Surrey.

I came to Sussex on the recommendation of my school’s careers adviser who thought as a new university, the course would be more fun. It also had great course flexibility as there was no need to choose an engineering discipline until the third year. A large part of being at Sussex was living in Brighton with its many attractions and distractions.

Sussex reputedly then had the highest proportion of car-owning students of any university. I drove an Austin 7 that I had bought from an electrical engineering student for £45. I still have it.

I once bought a windmill at auction because no one else was bidding. During the 1990s I was working on a shopping centre in Kent. Seeing the brick base of a windmill for sale in a nearby property auction, I attended with the intention of offering my limited experience on windmills to the purchaser. Bidding was sluggish and I raised my hand just once. This left some explaining to do when I got home! We then set about reconstructing the windmill, complete with sails, and the interior is now occupied as a house.

Kent was too far away from our children’s schools so we started looking for a former windmill site closer to home. This led to Ashcombe, near Lewes, and the windmill project has now been eight years in the making. The sails, or sweeps as they are known in Kent and Sussex, have already been turning and the next step will be to install the generator. Once this is connected, the windmill should generate enough electricity to power three houses, and feed any excess back into the grid.

At some point, I’d like to install millstones too, to produce flour by the traditional method. But original French burr stones in decent condition are hard to come by; they all come from one quarry on the outskirts of Paris.

Next year my wife and I will be living here. Although not visible until you reach the mill, there is a house encircling the base, which is being built to Passive House requirements making it highly energy efficient.

More about Ashcombe Windmill

ASHCOMBE WINDMILL was originally built in 1828 and destroyed by a storm in 1916.

Compared to a modern wind turbine, whose sails can turn at 35 rpm, the sweeps at Ashcombe Mill turn at an average 12 RPM.

Ashcombe Mill stands out for having six sweeps instead of the more usual four-sweep configuration, as seen on other Jack and Jill windmills in the county.

Although the upper structure weighs approximately 30 TONS, it can be turned to face the wind by a single person pushing the tail pole.

Inside, the traditional wooden ceiling joists and floors are held together by a modern steel framework.

Geologists have confirmed that a layer of volcanic ash in the chalk base of the windmill is called the Southeram Marl which can be traced, on its chemistry, all the way across Northern Europe to Russia. It was formed in the Upper Turonian era, about 86 MILLION YEARS ago.

PASSIVE HOUSE is a rigorous, voluntary standard for energy efficiency in a building, reducing its ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling.
From fresh new starts to accolades for leading the field, Sussex alumni have been busy making their mark across the globe over the past year. Here is a short selection of their news.

**Awards**

Congratulations to all alumni and staff whose achievements have been recognised recently. They include:

**PROFESSOR LESLEY FALLOWFIELD** (BZS 1976), Director of Sussex Health Outcomes Research and Education in Cancer; **PROFESSOR GEORGINA MACE**, CBE FRS (SCITECH 1976), Director of the University Outcomes Research and Education in Cancer; and **PROFESSOR ROD KEDWARD** (ENGAM 1994), named a Distinguished University Chair. Each has been awarded the Légion d'Honneur, the highest French honour. D-Day veteran **PROFESSOR A. C. GRAYLING** (ENGAM 1994) was named CEO of the Fiscal Board in October 2016. **PROFESSOR ANNE THORELL** (CPES 1996) and **STEPHENVEN** (PSYCHOLOGY 2007) were selected to train with the Great British women's hockey team, becoming one of only two Welsh women to receive GB recognition since 2012.

**Career Highlights**

Documentary filmmaker **MICK GOLD** (EAM 1966) produced and directed BBC2’s The Arc of History, the fourth film in the series inside Obama’s White House. **PETER BEARD** (MEDIA PRACTICE AND THEORY 2004) launched Heydon Prowse, a brand aiming to complement a range of toys with a focus on quality and design. **JACK MERLIN BRUCE** (PHILOSOPHY AND ENGLISH 2014) was nominated for a 2016 BAFTA award in the children’s short form category.

**New Ventures**

**JACK HIBBERD** (EAM 1997) has returned to Brighton 15 years after graduating to become the director of Laine Brew Co, a new craft brewery in Brighton. **JACK HIBBERD** (EAM 1997) founded The Tooth Company, a holistic dental care centre in Hyderabad, India. The centre was opened by Bollywood actor Rana Daggubati. **JACK HIBBERD** (EAM 1997) co-founded a 20-year reunion for the MA in Contemporary European Studies 1995 group, also marking a half-century anniversary, revisited their Spring Street in Brighton where they lived in their final years, while **NÉE REDDAN ARVE JOHANNESSEN** (EUROSCIENCE 1996) coordinated a 20-year reunion for the MA in Contemporary European Studies 1995 group, also marking a half-century anniversary, revisited their Spring Street in Brighton where they lived in their final years.

**Sporting Success**

Team GB orient**DAVID STONE MBE (SOCIAL WORK 2002)** won silver in the road race and bronze in the time trial at the Paralympic Games in Rio to take his overall Paralympic medal haul to six. Scientist and Research Director at Building Research Establishment **ED SUTTIE** (CHEMISTRY 1998) trekked to the North Pole in April 2016, raising more than £50,000 for various charities.

See more Alumni News at [WWW.SUSSEX.AC.UK/FALMEREXTRA](http://WWW.SUSSEX.AC.UK/FALMEREXTRA) and send your latest news to [ALUMNI@SUSSEX.AC.UK](mailto:ALUMNI@SUSSEX.AC.UK)

24 — 25
The charity MQ, which was recently formed as the first mental health research charity, has reported that funding for mental health research lags way behind cancer and dementia research funding. It is estimated that for every person affected, the research spending per patient is £178 for cancer, £110 for dementia and only £8 for mental illness.

Given the devastating impact of mental illness at present, it is somewhat surprising and disappointing to learn that pharmaceutical companies in the UK are opting to reduce their efforts in this area. The fact that drug discovery for mental health disorders is being systematically deprioritised by drug companies has left a vacuum that the Sussex Drug Discovery Centre (SDDC) aims to fill.

**OUR APPROACH**

Initial funding for the SDDC came from the University and Cancer Research UK to develop some cancer drug discovery projects. Then, in 2014, we began a project that looked to develop new drugs to treat the cognitive deficit associated with schizophrenia and this attracted a major award of £4.1m from the Wellcome Trust. The project targets a protein in the brain called the AMPA receptor, which is an ion channel that helps to control nerve cell excitability. This technically challenging project required specialist expertise. At this time, SDDC benefited from the closure of the Novartis site in Horsham and were able to recruit Martin Gosling, Professor of Molecular Pharmacology and a scientist with internationally-recognised ion channel technical capability. Professor Gosling is also the Chief Scientific Officer of Enterprise Therapeutics, a small biotech company which focuses on respiratory diseases and is now based within the SDDC.

The addition of this ion-channel horsepower enabled the SDDC to secure significant additional funding in 2015 from the Wellcome Trust to identify a drug for treating the cognitive deficit associated with Huntington’s disease, an inherited condition that damages certain nerve cells in the brain. Further Wellcome Trust funding supported a project to identify a novel epileptic drug. In addition, we secured funding from the Medical Research Council (MRC) for SDDC scientists to identify a novel anxiolytic drug which lacks the sedative effects of drugs such as Valium.

The scale of the problems associated with mental health is difficult to overestimate. Quite shocking, deaths due to suicide occur at a rate of one every 40 seconds globally, and easily outnumber those associated with malaria or breast cancer, as well as those of wars, conflicts and disasters. The lifespan of someone with severe mental illness is reduced by 15-20 years.

Aside from the emotional costs to the individual and associated family and carers, the global financial burden of mental illness was estimated to be in the region of $2,500 billion in 2010 and are set to grow to $6,000 billion by 2030.

The economic impact is magnified by the fact that compared to old age-related diseases such as the dementias, mental illness has a disproportionate effect on young, middle-aged adults and therefore strikes during the most productive years of an adult’s life. Moreover, mental illness is a global issue that can result in human rights abuses such as incarceration, seclusion, isolation and exclusion and denial of basic amenities.

Despite this, there is a relative lack of research funding for mental health. This is particularly disappointing at a time when the emergence of new genetic information is, for the first time, providing insights into disease mechanisms that can provide the basis of new therapeutic approaches to mental illness. A unique challenge with identifying mental health conditions has been that, compared with neurological disorders such as Alzheimer’s, Parkinson’s and motor neuron disease, mental illness presents no clear pathological changes in the brain to provide us with clues to what the underlying disease mechanisms are.

Building on the University’s existing world-leading academic expertise, the Sussex Drug Discovery Centre has rapidly established itself as the only UK centre for the development of new drug treatments for mental health disorders. Professor John Atack looks at the opportunities to further the outstanding work of this much-needed initiative.
The Sussex Drug Discovery Centre was the brainchild of Professor Laurence Pearl, the Head of the School of Life Sciences. He recognised the potential to define a new model of drug discovery, one that was in close geographical and scientific proximity to world-leading academic science rather than being performed in insular, monopolistic pharmaceutical companies.

The vision was to establish the SDDC to build upon the University’s world-leading academic expertise residing within the Genome Damage and Stability Centre, and neuroscience research groups, to develop new drugs for treating cancer and disorders of the central nervous system, respectively. By doing so we are able to address significant unmet medical needs.

In addition, the success of the SDDC has resulted in significant research income, plus the potential to generate income from upfront fees and royalty streams when drugs are commercialised and sold to pharmaceutical companies. Furthermore, the training and education opportunities provided by the SDDC in terms of teaching and undergraduate, Masters and PhD lab-based training for the next generation of drug discovery scientists is invaluable. It was based upon this very clear vision that Professor Pearl was able to secure significant funding from the University’s Research Development Fund.

The SDDC’s success in obtaining funding for neuroscience drug discovery projects for schizophrenia, Huntington’s disease, anxiety disorders and epilepsy is, in part, due to the concerns of research funding bodies, such as the Wellcome Trust and the MRC. The concern is that, despite an obvious medical need, research in this area (with the notable exception of dementia) has significantly reduced over the past decade, directly causing pharmaceutical companies to reign in expenditure on neuroscience drug discovery. Where funding has been retained, the focus has been on Alzheimer’s disease at the expense of mental health.

The effects of underinvestment in both basic research and drug discovery have been most acutely felt in the UK, where many global pharmaceutical companies have based the majority of their neuroscience efforts. Over the past decade GSK, Merck, AstraZeneca, Pfizer, Eisai, Organon/Schering, Shire and Takeda have all eliminated their UK neuroscience drug discovery efforts. Moreover, the single remaining company, Eli Lilly, has recently refocused its efforts solely onto neurodegeneration rather than pursuing mental health disorders.

In the face of such economic adversity, the SDDC has continued to gain financial and scientific traction. The Centre is now made up of around 70 people and to date has attracted research funding in the region of £25 million. Even more importantly, additional funding recently awarded by The Sackler Trust will permit the SDDC to sift through large amounts of emerging genetic data and prioritise and prosecute the next generation of drug discovery projects, thereby sustaining its national leadership position, and keeping mental health research at the top of the ladder.

By taking this approach, the SDDC has rapidly established itself as the preeminent drug discovery centre of its kind within the UK and, arguably, Europe.

WHERE IT ALL BEGAN

Putting a Plan Into Action

The first person through the SDDC door in late 2011 was Simon Ward, Professor of Medicinal Chemistry. Following a career in both large and small pharmaceutical companies, and being a victim of the closure of GSK’s psychiatric drug discovery until in Harlow, he arrived to an empty office, an empty lab and a blank piece of paper. His first job was to recruit a couple of chemists and a biologist to get things going by refurbishing and equipping labs. Next to join in mid-2012 was John Atack, Professor of Molecular Pharmacology, who again joined having had a career in neuroscience drug discovery with Merck and then Janssen.

A founding and enduring principle of the SDDC is that the two primary disciplines required for drug discovery, namely medicinal chemistry and biology, should be co-localised and intermingled such that there are no barriers between disciplines, which not only facilitates information exchange but also broadens the training and research opportunities.

Although new to the Higher Education environment when they started, Professors Atack and Ward were able to map out their vision for the SDDC, securing the grants and support necessary to establish the excellent reputation it has today.

RESEARCH SPENDING PER PERSON

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WHERE IS IT ALL BEGAN

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Although new to the Higher Education environment when they started, Professors Atack and Ward were able to map out their vision for the SDDC, securing the grants and support necessary to establish the excellent reputation it has today.
Brexit is possibly the largest political shock most of us will see in our lifetimes; it is certainly the largest administrative shock that we shall see. Uncoupling the UK from the European Union after 44 years affects almost every aspect of our lives. Even setting aside the political complexity of trying to work out what we want, it requires immense amounts of policy formulation and administration to achieve. You might think that it is exactly the sort of task that we have universities to help with.

That is precisely what we thought when we set up the UK Trade Policy Observatory (UKTPO) days after the EU referendum. But the seed was sewn before that: international trade policy and Europe have long been specialisms in the Department of Economics and a few years ago Law and International Relations also appointed trade specialists. In 2013 we formed an interdisciplinary discussion group to do what academics do – explore ideas, discuss each other’s papers and generally have fun. When we had recovered from the immediate shock of the referendum result we realised that we had exactly what Britain needed – genuine interdisciplinary expertise on international and European trade, experience of the policy world (see the UKTPO webpage). Members have met regularly for wise and great team spirit. Alan Winters proposed an interdisciplinary discussion group to do what academics do – explore ideas, discuss each other’s papers and generally have fun.

The University played a key role in analysing the creation of the European Single Market, as, from elsewhere, did UKTPO Director Alan Winters, who worked on it with Chatham House, while Jim Rollo (Deputy Director) worked on UK accession to the European Economic Community in the early seventies as a young government economist. Both Jim and Alan spent much of their time as Government Chief Economists (JPC1 and UNH respectively) working with EU colleagues on joint concerns. The UKTPO offers independent advice and training to assist government, parliament and businesses to address the international trade challenges posed by Brexit, and it also aims to inform the public about the issues at stake.

When we had recovered from the immediate shock of the referendum result we realised that we had exactly what Britain needed – genuine interdisciplinary expertise on international and European trade, experience of the policy world and great team spirit. Alan Winters proposed UKTPO at 9am on 28 June, everyone had agreed by 10am. By the end of the week a generous alumnus donor had covered its costs for six months or more and it was launched, with partner Chatham House, on 21 July.

The UKTPO offers independent advice and training to assist government, parliament and businesses to address the international trade challenges posed by Brexit, and it also aims to inform the public about the issues at stake. Members of UKTPO have produced several briefing papers and blogs alongside a steady line of high-profile meetings and public appearances (see the UKTPO webpage). Members have met with ministers and government departments, prepared a paper for DFID and advised, participated as expert witnesses at, and submitted evidence to two House of Lords and two House of Commons inquiries. UKTPO is regularly quoted in the national media, including The Times, The Independent and The Economist, as well as international media ranging from the row tunes journal and South China Morning Post to The Guardian.

So, what do we say? We have argued that the UK government has two large pressing trade negotiations to undertake over the next two years. First, while the UK is certainly a full member of the World Trade Organisation (WTO), its rights and obligations under the WTO have been submitted to the WTO by the EU. Thus, the UK needs to separate its own position from that of the remainder of the EU within the WTO. In general, this should not be complicated – initially it merely involves current obligations ‘UK’ rather than ‘EU’ in a process the WTO has for purely technical adjustments to schedules of obligations. But, there are a few more complicated issues in agriculture, such as the right to subsidise agriculture and the obligation to import some goods at low tariffs (so-called tariff-rate quotas), where the EU has made EU-wide obligations. These have to be broken up into UK and EU shares. And the UK will need to sign the Agreement on Government Procurement rather than being part of the EU commitment. Once the dust from Brexit has settled, however, the government can start to think about renegotiating our WTO offer to a form tailored specifically to the UK’s needs.

Even the withdrawal process set out under Article 50 of the Treaty on European Union is ambiguous and without legal precedent because no-one has left before.
Second, the UK needs to determine its relationship with the EU. The UK and the EU currently have very good access to each other’s markets, with a minimum of bureaucratic costs. This benefits buyers and sellers alike. The government suggests that UK citizens expect it to restrict entry of goods from the EU to some extent and the EU is clear that this means that the UK cannot remain as a full member of the so-called Single Market, which currently eases trade by harmonising regulations across the union. The UK should aim to preserve as much as possible of the favourable access by negotiating a bespoke agreement with the EU. Until the WTO and EU relationships are settled, other countries will not want to discuss special trade deals (Free Trade Agreements) with the UK, because they won’t know what they are avoiding (the UK’s ‘standard’ trading partner in the WTO) or whether the UK will be an attractive way of accessing the EU. So, once these are settled, further deals will become possible, including with developing countries – a particular focus of research at Sussex.

Brexit details also talk about the 27 countries – 4 in sub-Saharan Africa, 31 in the Caribbean, and 15 in the Pacific – with which the UK has a formal trade and development relationship via the EU (i.e., ACP countries), these countries get preferential access and development assistance from Europe. The UK also, through the EU’s Everything But Arms initiative and its Generalised System of Preferences, offers other low income and least developed countries preferential access. Brexit releases the UK from these commitments, which raises questions about the future shape of trade relations of the UK and EU with developing countries. There are opportunities to improve on the current economic partnership agreements with ACP countries; or to craft a new trade relationship with the Commonwealth. Yet, Brexit will render vulnerable key ACP exports such as bananas, sugar, and fish, exposing the ACP countries to competition from world markets that would generate a huge economic shock that would have very dramatic economic consequences in the short to medium term, unless remit enrolments are forthcoming. The UK must ensure that its new trade relationships are not to the detriment of smaller and weaker countries. It should offer these countries no worse access to its market than they currently get under the EU and, because for a few years, it will resist trade relations with developing countries to make them even more governance. Brexit poses not only economic and political challenges but legal ones as well. Alongside the inevitable legal question of how the UK extracts itself from the EU, unforeseen existential challenges have also appeared in the form of the question of Scottish independence and membership of the EU. The Irish border and ultimately the nature, scope and focus of the remaining 27-member bloc of the EU.

The UK grants other low income and least developed countries preferential access. Brexit releases the UK from these commitments, which raises questions about the future shape of trade relations of the UK and EU with developing countries. Even the withdrawal process set out under Article 50 of the Treaty on European Union (TEU) is entangled without legal precedent because no-one has left before. Other options for withdrawal have also been proposed: for example, Article 48 TEU process provides for changing the treaties of the EU, or recourse to public international law under Article 34 of the Vienna Convention on the Law of Treaties 1969, while others suggest that the UK repeal the European Communities Act 1972 and simply replace it with new UK law. To provide some certainty, the Government has stated it will trigger Article 50 on 29 March 2017. Interest to refuse to opt into the Single TEU process and to unilaterally utilise through express repeal of the 1972 Act would have adverse political and legal repercussions at both the EU and international law level.

The Brexit process opens a new window to develop a trade and economic partnership agreement with the UK. The EU and the UK will want to access the benefits and the duty of building a strong partnership. The UK will want to maintain relations with the EU and the EU will want to maintain relations with the UK. The relationship will require new arrangements and new agreements that will take into account the interests of both parties. The agreement will need to be comprehensive and cover all aspects of the relationship between the UK and the EU. The agreement will need to be implemented within a timeframe that is acceptable to both parties. The agreement will need to be subject to ratification by both parties. The agreement will need to be reviewed on a regular basis to ensure that it remains relevant and effective.

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For the latest news, comments and events, visit: BLOGS.SUSSEX.AC.UK/UKTPO
Don’t answer that phone!

Driving while talking on a hands-free phone can be as distracting as talking on a hand-held mobile, according to new research by psychologist Dr Graham Hole. He said: “A popular misconception is that using a mobile while driving is safe, as long as the driver uses a hands-free phone. “Our research shows that hands-free can be equally distracting because conversations can cause the driver to visually imagine what they’re talking about. This visual imagery competes for processing resources with what the driver sees in front of them on the road.”

Largest ever study reveals globally protected areas benefit a broad range of species

The world’s protected areas do benefit a broad range of species, scientists from a collaborative research project led by the University of Sussex have discovered for the first time.

The study, carried out by the Sussex Sustainability Research Programme working together with the Natural History Museum and the UN Environment Programme’s World Conservation Monitoring Centre, is the largest ever analysis of globally protected areas.

Dr Jim Scharlemann, from the University of Sussex, said: “Protected areas are widely considered essential for biodiversity conservation, but our results show for the first time that they do actually benefit a wide range of species. “Our results reinforce recent commitments by governments for increased support and recognition of the importance of protected areas worldwide.” He added, “We cannot deny the global significance and work to improve the effectiveness. “Protected areas do not currently benefit all species – but what we have shown in our study is they have the potential to help us conserve some of the most biodiverse areas on Earth, which is why they vitally need increased global support.”

15% NUMBERS OF INDIVIDUAL SPECIES WERE UP BY 15% WHEN FOUND AT SITES INSIDE PROTECTED AREAS.

11% THERE WAS AN 11% INCREASE OF DIFFERENT SPECIES FOUND INSIDE PROTECTED AREAS.

Our results reinforce recent commitments by governments for increased support and recognition of the importance of protected areas worldwide.

Construction of practical quantum computers radically simplified

Scientists at the University of Sussex have invented a ground-breaking new method that puts the construction of large-scale quantum computers within reach of current technology.

Professor Winfried Hensinger and his colleagues have invented a method whereby voltages are applied to a quantum computer microchip without the need to align laser beams.

Quantum computing on a small scale using trapped ions (charged atoms) is traditionally carried out by aligning individual laser beams onto individual ions in a process forming a quantum bit. However, a large-scale quantum computer would need billions of quantum bits, therefore requiring billions of precisely aligned lasers, one for each ion.

By applying voltages to a quantum computer microchip using Professor Winfried Hensinger’s radically simplified method, the same effect is achieved.

Quantum computers could, in just a few milliseconds, solve certain problems that would take the fastest supercomputer millions of years to calculate. They have the potential to create new materials and medicines, as well as solve long-standing scientific and financial problems.

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Drivers using a hands-free phone looked at an area of the scene ahead approximately FOUR TIMES SMALLER than the area looked at by undistracted drivers.

Drivers having a hands-free phone conversation which sparked their visual imagination DETECTED HALF AS MANY HAZARDS as undistracted drivers.

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Groundwater is a vital resource to meet the demands for safe water for drinking, hygiene, irrigation and industry around the world. Groundwater also sustains rivers, lakes and wetlands when rainfall is low or absent.

In sub-Saharan Africa, much of the population still lacks access to improved, safe and affordable water supply. In addition, most African agriculture remains rain-fed, which leaves farmers vulnerable to losses from poor rains and limits the number of possible harvests and yields. The 2016 El Niño-related droughts across much of Southern Africa and Ethiopia has left tens of millions of people in need of food assistance.

However, in many regions, African agriculture is changing quickly with increased use of groundwater-fed irrigation by both small-scale farmers and large-scale commercial agri-business. This allows the intensification of agriculture likely to be necessary to meet demands from increasing population and commercialisation and as a measure to increase resilience to climate variability and change.

Compared to most other regions, groundwater in Africa is underdeveloped, but there is a need to avoid the over-extraction of the resource that has taken place elsewhere leading to unsustainable development. The multi-disciplinary GroFutures project seeks to establish the scientific evidence base to inform policy towards development of groundwater resources that is both sustainable and equitable. GroFutures is an international consortium of researchers from across Africa and the UK and France, including Professor Martin Todd from Sussex and John Thompson from the Institute of Development Studies (IDS).

Lack of high quality and long-term data is a major barrier to understanding groundwater resources and to appropriate management of the resources. GroFutures will undertake unrivalled, uniquely detailed observations of groundwater recharge processes through the establishment of a Network of African Groundwater Observatories (NAGO) (Diagram right). This will enable comparative analyses of multiple sites involving sites along topographical transects, thereby providing a means to ‘scale-up’ and generalise from specific sites.

In short, we want to be able to inform groundwater management across Africa, but groundwater recharge characteristics depend on climate and geology. So by having site and across a set of climate and geological transects we hope to be able to characterise conditions across a wide range of conditions in Africa.

Along with a sister project ‘Chronicles’, we will develop the most comprehensive dataset yet on groundwater in Africa. Long-term data is critical for managing groundwater.

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Agricultural innovation founded on exploitation of groundwater resources clearly has the potential to transform livelihoods for small-scale farmers.

For example, our analysis of a 70-year record of groundwater levels at a wellfield tapping the Tanzanian capital city Dodoma shows that these groundwater aquifers are recharged only once every seven years on average, typically during heavy rains associated with El Niño. El Niño brings both drought and heavy rains to different parts of Africa. In anticipation of the 2015 El Niño, we installed equipment to measure the recharge processes in unprecedented detail. This will support the development of improved models of the surface-groundwater system. Such models are critical for water management of sustainable development. This will allow us to develop and evaluate scenarios of future groundwater use under a range of assumptions about future socio-economic development trajectories and under future climate change. These “development pathways” will be “co-produced” with a wide range of stakeholders from government agencies to civil society and community water user groups. In this way, we will promote the inclusion of poor people’s voices in long-term groundwater resource planning and development decision-making, to try to ensure equitable distribution of benefits.

To illustrate, during the recent inception workshop in Ethiopia, the GroFutures team visited some of the project field sites in the upper Awash river basin in the Rift Valley region of Ethiopia, about 80km south of the capital Addis Ababa. Here, they met small-scale farmers who are developing a feared groundwater tube-well for irrigation of their small one to two hectare plots. Irrigation allows them to innovate with a variety of crops, including vegetables (legumes, tomatoes, peppers, avocados, carrots, oramos) for market, providing a three-fold increase in annual yields. The Rift Valley region is also experiencing rapid expansion of large-scale commercial farms, notably flower and citrus production, also based on exploitation of groundwater resources. This type of agricultural innovation founded on exploitation of groundwater resources clearly has the potential to transform livelihoods for small-scale farmers. Sustainable and equitable management of the resources should be informed by the best available science and GroFutures is rising to meet that challenge.

Find out more about the GroFutures project at: WWW.GROFUTURES.ORG

We are privileged to be in touch with many dedicated and inspirational former students who give something back to Sussex in so many different ways: enriching student life, supporting scholarships, building networks overseas or helping to open doors. Here we introduce you to some of our committed alumni volunteers.

John Leonida (Economics 1981) is a partner in the global law firm Clyde & Co. As well as generously providing his financial support to an exceptional PhD student within the Neuroscience department, he has returned to Sussex many times giving careers talks at Make It Happen events and delivering masterclasses in international marine law.

John explains: “Helping current undergraduates get the most out of their time at Sussex and giving them a gentle nudge when it comes to career choices is such an easy way to give back to the University. The students value our time more than anything else.”

Cate Haste (ENGAM 1983) is a television documentary producer and director, writer and broadcaster. She recently gave a series of masterclasses on documentary film-making to students in the School of Media, Film and Music (MFM).

Cate explains why she volunteered to teach at Sussex: “I thought not exactly retired, I was interested in keeping in touch with the mainstream of life from the perspective of the young. So, while I am giving back, I am also being rewarded by being part of the continuing life of a very active and vibrant university community.”

Cate has also made a generous gift to the University to establish The Cate Haste Scholarship to enable MFM postgraduate students in financial need to complete their studies at Sussex.

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DR SPIROS DIMOLOTAS (EENG 1978) is senior Vice-President for Research and Chief Technology Officer at Georgetown University in the UK. He plays an important role in establishing research and other connections between Sussex and Georgetown University. “My continuing relationship with Sussex is an important link to the University, the UK and Europe more broadly. For example, Georgetown University and Sussex share an interest in humanitarian crises such as forced migration. Sussex and Georgetown have been collaborating by contributing their respective areas of excellence in migration studies towards addressing this very current and important issue.”

Spiros is also a long-standing supporter and member of the Board of The American Friends of the University of Sussex, a 501(c)(3) charitable organisation in the U.S.

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See more alumni profiles and find out how to get involved at: WWW.SUSSEX.AC.UK.ALMUN/GETINVOLVED

THE BACK PAGES | GIFT OF TIME
Forthcoming Events

We hold events throughout the year both on campus and around the world. Here is a small selection of what’s coming up in the next few months:

**SUSSEX CONVERSATIONS: ‘DEMOCKERY’ AND THE MEDIA IN A POST-FACTUAL AGE**
Chaired by Sarah Montague, BBC Radio 4 journalist and Sussex honorary graduate.
Wednesday 3 May, 6.30pm. Royal Institution of Great Britain, 21 Albemarle Street, London

**BRITAIN AND EUROPE: HOW WE GOT HERE AND WHERE WE GO NEXT**

**FAREWELL TO EAST SLOPE!**
Drinks, DJs and your last chance to say goodbye to the infamous East Slope flats. Saturday 24 June, 8pm-2am. East Slope Bar, University of Sussex. Tickets £20

**COMMUNITY OPEN DAY**
The University throws open its doors with talks, tours and activities for all ages. All welcome!
Sunday 25 June, all day. University of Sussex

**BRITISH SCIENCE FESTIVAL 2017**
A five-day science extravaganza co-hosted by the Universities of Sussex and Brighton across multiple locations on campus and in Brighton. 5-9 September

**SUSSEX LECTURES FOR THE SUMMER TERM**
All lectures take place 6.30-8pm, in the Chown Lecture Theatre, University of Sussex

**MAKING SENSE OF TEXT**
David Weir, Professor of Computer Science. Wednesday 10 May

**REPRODUCTIVE POLITICS IN INDIA: GIVING THE BODY A VOICE**
Maya Unnithan, Professor of Social and Medical Anthropology. Wednesday 17 May

**SEEING IN COLOUR**
Anna Franklin, Professor of Visual Perception and Cognition. Wednesday 7 June

Visit [WWW.SUSSEX.AC.UK/ALUMNI](http://WWW.SUSSEX.AC.UK/ALUMNI) for further details and booking

Don't miss out! All our event invitations are sent out via email, so please ensure that we have your current email address and postal address (so that you get sent details about events in your region). If you don't receive your monthly Sussex News by email, we probably don't have your address!
We were among the first to occupy the ‘Kier Houses’ in 1969. These were the first houses for students to be built on the Sussex campus.

DR ALLEN CATON (APPLIED SCIENCES 1968)

East Slope – what an evocative name – but perhaps better than any proposed at the time, ‘Paschendaele’, suggested because the mud and the contractor’s survey shapes: modern markers were apparently reminiscent of the First World War battlefields.

TONY GLASER (RDS 1973)

In August 2016, Brighton & Hove City Council approved plans to redevelop the East Slope accommodation. The existing flats housing 900 students will be demolished and the new development will accommodate 2,100 bedrooms, as well as a new Students’ Union building and social hub.

We are inviting alumni to come and say a last goodbye to the flats at a farewell bash in June at East Slope Bar. In the meantime, here are just a few of the memories alumni have shared with us about their time living in the ‘rabbit hutch’s of East Slope…

East Slope: going, going…

CAROLINE NOAKES MP

It was just a cool place to hang out. A dive bar. That was the feeling you got from it. East Slope Bar had a kinda cool edginess to it.

ARAM NADJARIAH (IR 2006)

I loved our six-person flat: after a gap year living in low-cost accommodation in London, it was home and erging on luxury. It was the most radical university housing I had seen – not a hall with long corridors, with bedrooms shared by scores of people, and a flat plus was that it was self-catering, so all very non-institutional.

DR ROSIE BURTON (BIOLS 1978)

When I arrived as one of the very few EMERSON students, I was delighted to hear that I would be accommodated at East Slope (Flat 34C – even 20 years later, I can’t help but think to remember this number, the name itself evoked memories of my birthplace: The Alps!

Now, East Slope conjures up memories of my birthplace: The Alps! 26 years later, I don’t have to think twice to remember my first year at Sussex in 2001.

CLAIRE CHOUDHURY (ENGAM 1975)

I spent my first and third years and part of one summer in the rabbit hutch’s of East Slope. It had started life at Sussex as the bombs age of 10 in October 1975 with a single suitcase and a box of LPs. When I returned two years later, I had gained a wife and a baby! I kept partially blame East Slope.

I spent a lot of my first year in Flat 5 with my then girlfriend. However, Flat 4 felt like my spiritual home. As far as I shared self-catering student accommodation goes, Flat 5 was pretty well organised. Most of us gathered there for anything vaguely cooked, like cooking and eating.

On the other hand, Flat 4 was every man or woman for themselves. It seemed like the University had hand-picked the 12 most impractical, lazy, sedentary and hedonistic undergraduates they could find as part of some experiment. It was party central.

As a family, we remained drawn to East Slope as our elder daughter lived at Flat 3 in her first year at Sussex in 2001.

JIM SKINNER (ENGAM 1975)

I got involved working at East Slope Bar as a trainee licensee, learning to pull pints. We were paid in cider, which was great! One night I wandered back with my couple of bottles of cider and came face to face with alander who was rummaging through somebody’s dustbin. We just looked at each other for a while and then decided to make our own ways home.

LIZ HAYE (CCS 1985)

As a family, we remained drawn to East Slope as our elder daughter lived at Flat 3 in her first year at Sussex in 2001.

JIM SKINNER (ENGAM 1975)

I got involved working at East Slope Bar as a trainee licensee, learning to pull pints. We were paid in cider, which was great! One night I wandered back with my couple bottles of cider and came face to face with a lad who was rummaging through somebody’s dustbin. We just looked at each other for a while and then decided to make our own ways home.

LIZ HAYE (CCS 1985)

East Slope’s flats will always be in our hearts! Even if the flats are demolished, many memories will stay forever in our hearts.

MASSIMO TOSCHI (EURO 1992)

...
The embodiment of Sussex

From the perspective of the students in the 1960s, Asa Briggs was the most distinguished intellectual presence at the University of Sussex. We were all aware that he had written many books and was highly honoured beyond the University.

To the students who met him, he exuded a restlessly dynamic warmth. He had a sense that universities had to go beyond tolerance to whitelist eccentricities and embrace diversity, and he met each student on his or her own terms. No one ever came away from talking with Asa thinking that Asa’s purpose had been to impress him or her. He was genuinely interested in everyone he met and asked questions to help draw out individual personalities.

He endeavoured to put students at ease, and yet he so quickly grasped what we were saying and was so eager for us to move on to say more that his characteristic burst of “yes, yes, yes” quickened and often shortened interactions with him.

This characteristic extended to his teaching and postgraduate supervision. He heard what we had to say, and he understood it immediately. He wanted us to progress, to make the enormous leap from very good to excellent. He asked terse, penetrating questions; the first draft of my dissertation ran to 300 pages and was returned with fewer than 50 words in the margins. Once I had digested those words, I knew that I had to rewrite it completely.

When the student unrest of the 1960s came to Sussex, Asa responded sympathetically. As Vice-Chancellor, he went to speak in the Students’ Union; when he said that “as far as I know there is no CIA-funded research at the University” and received jeers for his qualifying phrase, he said that was all he could say honestly. There might be such research, but if so it was a secret that was being kept from him. His intellectual force, his sympathetic patience, and his willingness to meet the students repeatedly on their turf were crucial factors in maintaining peace on campus. The police were never called to put down student unrest at Sussex.

Asa Briggs was Sussex. Densely stout and short with white skin topped by red hair, his physical presence seemed to provide the model that Sir Basil Spence was rendering in the architecture of the buildings going up at Falmer. Above all, we knew then that he was the originator of the “new map of learning”, of the highly successful interdisciplinary organisation and the wellspring of the intellectual dynamism and innovative originality that made Sussex a great university in its first quarter century.

Eminent social historian, academic and ‘founding father’ of the University of Sussex, Lord Asa Briggs passed away in March 2016, aged 94. Here he is remembered by former student Dr Tom Kemnitz (ENGAM 1962).
Sir Harold Walter Kroto, FRS, was an award-winning English chemist who died aged 76 in April 2016. Dr Jonathan Hare (Chemistry 1989) recounts his time working with the remarkable scientist.

Voyage of discovery

In 1985 Harry Kroto and colleagues were trying to understand some intriguing chemistry that had been observed in the vast and beautiful molecular clouds between the stars. It was scientific curiosity simply for the pleasures of trying to better understand the universe. In a famous laboratory experiment they vaporised graphite (the ‘lead’ in your pencil); heating it up to the temperature of the surface of a star. They then ‘looked’ to see what happened when the atoms coalesced and came back together, and discovered a great deal of astro-chemistry during those pioneering experiments. By accident, they also uncovered a totally new form of carbon having exactly 60 carbon atoms (formulated C_{60}) and amazingly it turned out to be the shape of a tiny football. C_{60} is as many times smaller than a football as a football is to the Earth. It’s a thousandth of a millimetre in diameter - a nanometer. In a wonderful example of serendipity, they had stumbled upon a new area of nanotechnology: a family of ‘bucky’ type structures they called the ‘fullerenes’, which would lead the team members to the critical detective work of these unbounded curiosity, coupled with the creative and intelligent use of scientifi_c equipment, along with the pleasure of trying to better understand the universe. In a wonderful example of such discovery, it turned out to be the shape of a tiny football. C_{60} is as many times smaller than a football as a football is to the Earth. It’s a thousandth of a millimetre in diameter - a nanometer. 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Win a VIP weekend with Falmer

We are offering readers a chance to win a fabulous weekend in Brighton and on campus on 24-25 June 2017, or two runners-up prizes of Sussex goody bags.

First prize includes:
- A two-night stay for two people in a 4-star central Brighton hotel, Friday 23 – Saturday 24 June 2017.
- Two free tickets to the East Slope Farewell Party on Saturday 24 June, plus drinks vouchers.
- Lunch for two at any of the campus café outlets on either Saturday or Sunday.
- A Sussex goody bag.

The prize winner and guest will also be most welcome to attend our Community Open Day on campus on Sunday 25 June.

To enter, register your details in SussexSphere (or log in to your existing account) at www.alumni.sussex.ac.uk, or contact the Development and Alumni Relations Office quoting 'Falmer 2017 Competition' by email to alumni@sussex.ac.uk or telephone us on +44 (0)1273 678258.

When you are in SussexSphere, please take a moment to check and update your contact information and communication preferences in 'My alumni profile' to ensure that you continue to receive communications from Sussex.

Rules: The draw will be made on Monday 8 May 2017. The winner will be announced on Wednesday 10 May 2017. The winner and runners-up will be notified by telephone and email and the results published on the alumni web pages. There is no cash alternative. Full terms and conditions for the draw can be found at www.alumni.sussex.ac.uk/Falmer2017competition

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We realised that we had exactly what Britain needed – genuine interdisciplinary expertise on international and European trade, experience of the policy world and great team spirit.