

# LONDON STORIES 2017

A CIVIC UNIVERSITY AT THE HEART OF LONDON

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## PRINCIPAL'S foreword



I'm delighted to introduce these London stories, highlighting projects, partnerships, research and student initiatives across the university that contribute to a distinctive King's experience, benefit the capital and place the

university at London's heart. Together, they serve to show the breadth and depth of our commitment and connectivity to the city in which we live, work and learn.

While King's is proud to be a global institution, we also take seriously our responsibility to the city and communities around us. Earlier this year we launched King's Vision to 2029, the narrative that will guide all our activities as we approach our 200th anniversary year. The Vision sets out our aim, by 2029, to be London's leading civic university, making a valuable contribution to the capital's health and success through a wide range of collaborations that both draw London into King's and put King's expertise to work in ways that have meaning for London.

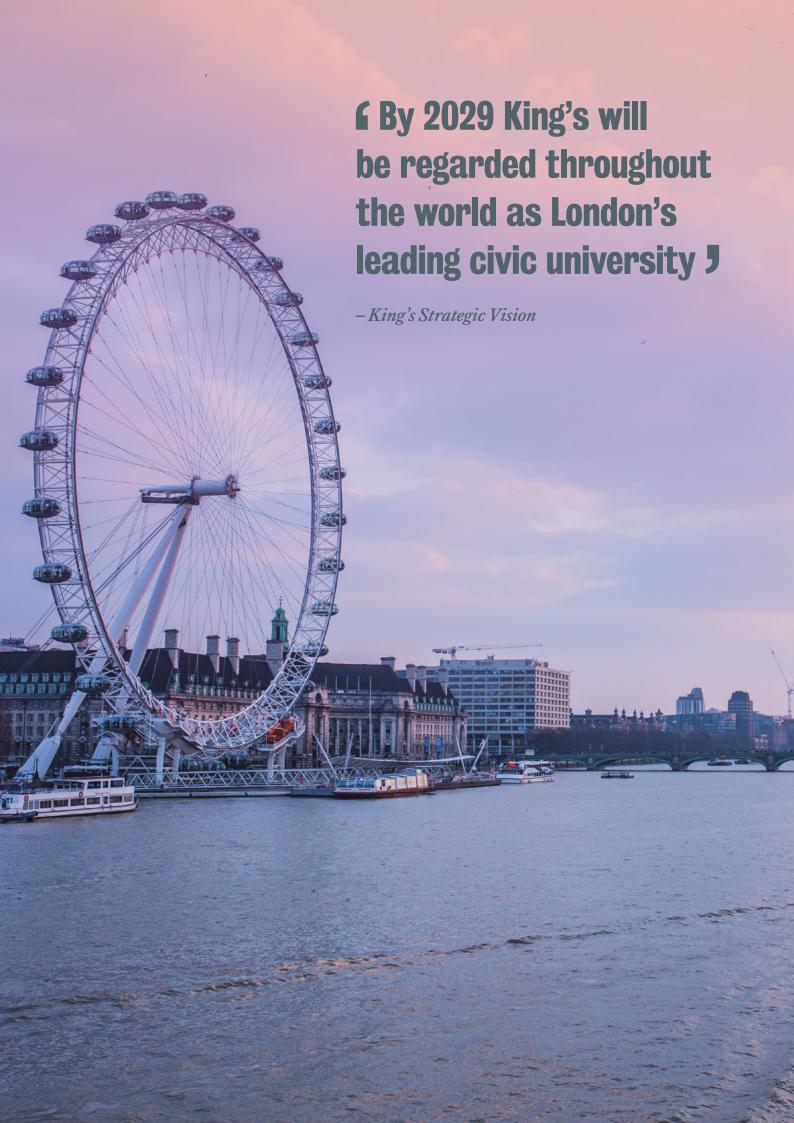
The stories in the pages that follow bring that vision to life, demonstrating how pioneering research at King's is helping to shape London's response to major challenges, from crime to pollution; how the university is drawing on London's rich diversity of experience and opportunity to educate the next generation of leaders and change-makers; and how King's staff and students are serving our local communities – from brushing up on dental hygiene for primary school children, to volunteering in law centres, or helping children from refugee backgrounds learn to read in English.

King's aspires to be of, and not just in, this great city in which we make our home. These stories offer a snapshot of the many ways in which that aspiration runs through everything we do.

#### **Professor Edward Byrne AC**

President & Principal, King's College London







### **ASSISTANT PRINCIPAL'S** introduction



In 2017, London was ranked the best university city in the world. It's not difficult to see why: the concentration of expertise, inspiration and opportunity as well as the local, national and international networks that make

up this capital city create a remarkable environment for learning and research - London is both a living classroom and a test bed for new ideas.

It's not surprising, then, that London is central to King's Strategic Vision 2029. The university's future is intertwined with London and, as we approach our 200th anniversary, we've set out our commitment to the health, success and wellbeing of this city and the communities that make it great.

Our approach is simple. At King's, we believe that working in partnership achieves even more for the communities around us, the city, our students and our academics. The London stories in the pages that follow illustrate some of the partnerships already in place across education and research - helping our students to learn from London and our academics to deliver groundbreaking research that helps the city address its key challenges and opportunities. And our partnerships extend across London's higher education institutions, recognising that London's challenges are unlikely to be solved by working alone.

With campuses across central and south London, we have a special responsibility to our 'home' boroughs. The university is embedded in these communities, not least through King's Health Partners. This partnership with three NHS Foundation Trusts brings together world class research, education and clinical practice, so new discoveries can be put swiftly into practice to improve mental and physical healthcare services for local communities - and beyond. The depth of these community relationships allows King's to connect local to global, generating knowledge with transnational impact.

As the world becomes increasingly interconnected and London ever more complex, its universities have an imperative to rediscover their civic purpose – to draw down global connections to deliver local benefits, support place-making, develop talent and bring together diverse voices to spark new ideas. King's students have set the bar high: these London stories include a few (of many) examples of projects developed with local communities in which they serve as they learn – and learn through service.

This commitment to our local communities, to our neighbourhoods and to the city around us is shared across the entire university and summed up in the ambition we've set ourselves on the road to 2029: to be a civic university at the heart of London.

#### **Deborah Bull**

Assistant Principal (London), King's College London



King's Maths School is a place where mathematics is brought to life for young people. Opened in 2014 and located in the heart of London, this state-funded school for gifted mathematicians aged 16 to 19 is run in partnership with King's.

Already the school is one of the highest-achieving in the UK. Students take A-levels in Mathematics, Further Mathematics and Physics at the end of their second year, and an AS-level in either Computer Science or Economics at the end of the first year. The school's first cohort of students completed their A-levels in 2016, with all gaining an A\* or A in A-level Mathematics, while 95 per cent of grades in all subjects were A\*, A or B.

In summer 2017, the second cohort graduated and attained exceptional results, with 58 per cent of all entries A\* grades, 88 per cent being graded at A\* or A, and 99 per cent graded at A\*, A or B. Dan Abramson, Head Teacher at the School said: 'I'm so proud of our students. These young people are not just bright – they have secured immensely impressive achievements through their passion and dedication, as well as through the inspiring way they collaborate and support each other. They will go onto wonderful things, and I'm honoured to have been able to work with them these last two years.'

#### At King's we aim to inspire current and future generations through education to be the problem solvers and change-makers the world needs. J

Dan Abramson, Head Teacher, King's Maths School

Mr Abramson is justifiably proud of the school's achievements. 'We have the best science A-level results of any school in the country. On top of that, our students are achieving, on average, over a grade higher in each subject

than those with similar GCSE results in other schools. I think that maths schools are something really special that could make a significant difference nationally, and hope to see more schools like ours opening over the next few years.'

King's is one of just two universities in the UK to have set up specialist sixth form maths colleges. In doing so, we hope to increase the number of well-trained mathematicians going on to study and work in highly mathematical disciplines. The school's selection process seeks out those students with an aptitude for mathematics who would not otherwise have access to excellent mathematics teaching at this stage of their education.

King's has reason to celebrate the school's early success: 94% of the school's first leavers are going on to study a science, technology, engineering or maths (STEM) subject at university, with over half studying maths and others taking computer science, physics, engineering and economics.

Our commitment to the school goes to the heart of our ambition to be London's leading civic university and to put our expertise and energy to work in the capital.

King's academics helped to plan the school's curriculum so that students are well prepared for university. Our PhD students mentor first-year pupils to help develop their problem-solving skills, and as of this year our academics will set research projects for King's Maths School students and support them to complete these. The school makes use of King's teaching facilities, libraries and fitness centre, and King's staff are involved in some of the school's many clubs and societies.

At King's we aim to inspire current and future generations through education to be the problem solvers and change-makers the world needs. Through King's Maths School we are taking bold and exciting steps towards achieving that aim.



Whether by volunteering, taking up an internship or getting involved in activities alongside their formal studies, King's students are encouraged to enhance their learning by doing, making the most of London as a living classroom and in turn contributing to the city.

> Open to all students, the King's Experience Awards recognise the learning that students have undertaken outside the formal curriculum. Their aim is to encourage students to explore different ways of learning, to help them form connections between classroom and experiential learning and to expand their social, personal and academic skills. Offered annually, the awards reflect King's belief that extra-curricular activities give breadth and depth to learning, add practical value to a degree and support King's students to become active and involved citizens.

While the practical benefits to students include the acquisition of new skills and enhanced employability, students also have the opportunity to develop personally as well as to gain a greater understanding of their local communities.

#### The awards reflect King's belief that extra-curricular activities give breadth and depth to learning.

The King's Experience London Award aims specifically to encourage and reward students' involvement in the communities in which they are living and studying. By volunteering with community organisations, or working with local schools to encourage wider participation in higher education, King's students can bring their commitment, enthusiasm and skills to London in ways that benefit both themselves and the community.

To gain a King's Experience London Award, students must complete at least 25 hours of experiential learning and submit a final assessment demonstrating their knowledge and understanding of one or more London communities. Winners must show how their activity has contributed to the community as well as how it has enhanced their formal academic learning.

Recent London Award winners include postgraduate student Jola Atoki, who took up an internship at the Hackney Community Law Centre, a charity providing free and independent legal advice to people living and working locally.

#### **6** I have gained a responsibility to this community, insofar as I am part of it through living and studying here. **J**

Jola Atoki, postgraduate student

Reflecting on the experience, she said: 'It was good to have something to look forward to every week apart from my academic work. I felt I was a part of something that was actually important and relevant.

'It's put what I've been taught in class into practice, so that the theoretical parts of my degree really come to life...it's sort of a dose of reality.'

She added: 'In a way, I feel like I have gained a responsibility to this community, insofar as I am part of it through living and studying here. I want to do my best to give back to them.'



Opening in September 2017 and located in the iconic Bush House, King's Business School aims to pioneer innovative approaches to education and to inspire the business leaders and entrepreneurs of tomorrow.

Leading the School as its inaugural Dean will be Professor Stephen Bach. Formerly Head of the School of Management & Business, Professor Bach has played a vital role in making the School's vision a reality.

# **6** King's Business School will combine the agility of a start-up with the heritage of King's. **J**

Professor Stephen Bach, Dean, King's Business School

'The times we are in are creating new challenges which require socially responsible leaders. The ability of King's to draw upon our interdisciplinary strengths will enable us to create the next generation of leaders properly equipped to meet the challenges facing both business and society,' said Professor Bach.

'King's Business School will combine the agility of a startup with the heritage of King's,' he added. 'We will build upon our prior success and aim to develop the premier undergraduate business school as a platform to specialist Masters programmes.'

King's Business School is now the ninth faculty at the university, complementing King's portfolio of faculties: Arts & Humanities; Dental Institute; Law; Life Sciences & Medicine; Natural & Mathematical Sciences; Nursing & Midwifery; Psychiatry, Psychology & Neuroscience; and Social Science & Public Policy.

King's is delighted that the Hong Kong-based businessman Dr Aron Harilela, Chairman and CEO of Harilela Hotels Ltd, has committed to support King's Business School, citing King's values and international activity as reasons for his support.

'London is one of the most forward-looking cities I know. People embrace change and modernity here, much more than in many other cities,' he said. 'I want to show that businesses can benefit society, and that we're all working towards the same goals.'

While the School's outlook will be global, its strengths remain rooted in its London location and connections. The School will leverage its extensive network of London-based partnerships to become a hub for engagement with business, finance, the City, government and NGOs.

Recognising the vital role that practitioners play in enhancing King's teaching and research, the School is delighted to have financier and entrepreneur Stefan Allesch-Taylor CBE as a Professor of Practice within the School, alongside such other leading practitioners such as Luke Johnson. Also contributing their experience and expertise in finance and economics are staff members Professor George Kapetanios, a consultant at the Bank of England, and Professor Martin Weale, a former member of the Bank of England's Monetary Policy Committee.



Which London Underground lines have the cleanest air? What do we know about the night-time economy of Westminster? How can joggers choose which London park to run in to avoid current air pollution?

> These are the city-centred challenges that have been tackled over the past three years at annual student hackathons hosted by the Centre for Urban Science and Progress London (CUSP London).

Hackathons bring together computer programmers, software developers and designers, and subject matter experts in an intensive collaboration, usually lasting just a few days or a week, with the goal of creating usable, innovative software.

#### Outputs have included an app to guide joggers on the best parks to exercise in to avoid the worst levels of air pollution.

Each of the CUSP London hackathons have involved some 40 to 50 people - experts from King's College London and the Greater London Authority, students from New York University and the University of Warwick, and a wide range of London-based governmental and commercial organisations. The aim has been to explore the data available on the given topic, and come up with analyses that will develop our understanding of - and help deliver practical solutions to - challenges that affect Londoners' everyday lives.

Outputs have included an app to guide joggers on the best parks to exercise in to avoid the worst levels of air pollution, an analysis of where those coming to Westminster in the evenings were coming from, and an examination of air pollution on different London Underground lines.

While these outputs were simple prototypes, they give helpful indications to governmental bodies and researchers as to what further analyses could be done, for what questions data exists to support robust analysis, and in what form the output of such analyses could be presented and accessed by the public.

The hackathons are an engaging and challenging way of connecting King's with the capital. By bringing together the brightest and best students and researchers from CUSP partner institutions with London-based subject matter experts, the hackathons also help develop our students' skills in thinking about how data science can solve realworld problems.

CUSP London enables researchers, businesses, local authorities and government agencies to apply urban science to improving public health and wellbeing. A partnership between King's, the University of Warwick and New York University, the Centre is based at Bush House, part of King's Strand Campus.

London is the first city to build on the success of CUSP in New York City - now established as a leader in the field of urban science and informatics. In establishing CUSP London, King's is at the forefront of an approach that draws on the real experience and big data available in cities, using London as a living laboratory to tackle the needs of our capital and some of the complex challenges it faces.



In a divisive social and political climate, how can arts and culture drive social change?

> This question kick-started the 2017 King's Cultural Challenge, the annual competition that gives King's students an opportunity to generate and debate ideas for how art and culture can make the world a better place, in partnership with four of London's most innovative and prestigious cultural organisations.

> Now in its fifth year, the Challenge enables students from first year undergraduates to PhD candidates and across all faculties at King's - to develop and test solutions to real-world challenges faced by London's leading cultural organisations.

The Challenge supports students in developing their responses to a core question and finalists are selected to pitch their ideas to a panel of judges from the Challenge's partner organisations.

The Cultural Challenge enables students to develop and test solutions to realworld challenges faced by London's leading cultural organisations.

The best ideas win their creators a paid internship with four of King's partner organisations: the Royal Opera House, Southbank Centre, the Roundhouse and the Victoria & Albert Museum.

Working alongside professionals in the cultural sector, the interns gain real-world work experience, develop critical skills and gain new insights to support them in their future careers. In a rapidly changing world, and with the workplace ever evolving, creativity will be an essential skill - enabling an imaginative approach to problem solving and to identifying and seizing the opportunities that the changing environment presents.

Students from Health as well as Arts & Sciences faculties enjoy the benefits of internships, which help students develop their creativity while bringing new ideas and the energy of the next generation to London's cultural sector.

#### In a rapidly changing world, and with the workplace ever evolving, creativity will be an essential skill.

Emma Lawrence, a third year English with Film BA student and participant in the Cultural Challenge praised the competition's benefit to her overall university experience, stating: 'It's been an invaluable addition to my time at King's, and I can't overstate the importance of cultural engagement in translating and transcending academic studies.



Going from classroom to clinic is a steep learning curve for many medical and dental students. Modern day clinical practice involves complex decision-making, relying on interpretation and close observation. Beyond their technical skills, clinicians need to be able to deal with ambiguity, to think creatively, and to communicate effectively with their patients.

> To equip students for the complexities of clinical practice, King's Dental Institute has pioneered an arts and humanities-based approach to learning that it is hoped will enhance not only their clinical skills and student experience, but also their ability to care for patients.

The pilot Clinical Humanities for Dental Undergraduates programme aimed to give students an interdisciplinary perspective on their learning that drew on King's location in the heart of the capital and London's unrivalled cultural heritage. The programme was facilitated by the Cultural Institute, one of King's specialist Culture teams working to broker relationships between King's and the cultural sector.

To hone their observation skills, students visited London's Courtauld Institute of Art to discuss multiple interpretations and learn to feel comfortable with ambiguity. A seminar in the Old Operating Theatre in St Thomas Street provided an historical perspective on the patientclinician relationship.

A ceramics workshop allowed students to explore the ambiguities of the unseen – dentists often have to make assessments through touch alone. By feeling objects and drawing what they felt, students were able to test their proprioceptive and discriminatory skills. Other seminars included working with an actor to improve non-verbal communication skills and with a screenwriter to consider complex decision-making, ambiguity and judgement calls.

Dr Flora Smyth-Zahra, senior clinical teacher at the Dental Institute and programme academic lead, said: 'While fewer students are studying humanities subjects in UK secondary schools there has at the same time been a call for increased critical thinking and humanistic skills in medical and dental education.

'The academic disciplines of the arts and humanities, steeped in subjectivity and interpretation, teach critical analysis, promote the contesting of ideas and foster creativity. Above all, they seek to enlighten our understanding of the human condition.

'Considering professional learning from this interdisciplinary perspective, improves students' critical thinking ability and improves how they cope and deliver care.

'The course is a first within dental schools, and the developing Clinical Humanities model is now extending across health faculties at King's and to Harvard University.'

Student feedback has been positive, citing increased confidence in their decision-making in clinical settings and improving their ability to deliver patient care. One third year student commented: 'I personally gained a lot from the experience and I feel it should be compulsory, just as the psychology and sociology courses are. I think it is important for students to recognise the relevance of acknowledging and learning from humanities in order to improve clinical practice.'

As students at the top dental school in Europe they already benefit from state of the art clinical and technical facilities. This innovative programme also enables students to explore other parts of the university, to engage with London and to capitalise on London's cultural offer - a distinctive feature of a King's education.



Law students at King's College London are making the leap from knowing the law to practising the law in a ground-breaking move that will also enable them to serve the university's wider communities.

> Recently launched by the Dickson Poon School of Law, King's Legal Clinic is a service offering free legal advice to the public from students studying law at King's.

Supervised throughout by a qualified lawyer, students working at the King's Legal Clinic interview clients, analyse their problem, research the issues and then send the clients written advice.

Working for the Legal Clinic is helping students gain a range of skills that differ from those they develop in lecture theatres and classrooms, while the experience of working on real-life problems is of critical value to their future employability. The students' work can either be credited as part of their degree course or it is carried out as an extracurricular activity.

#### The experience of working on real-life problems is of critical value to future employability.

Because many of the cases students encounter will involve people at the sharp end of political and legal decisions, involvement in the King's Legal Clinic requires them to think critically about how laws are made, who makes them, and what can be done where well-intentioned policy results in bad law.

The Legal Clinic has been able to draw on a network of London partners to help supervise the students. The initiative is working with law firms, barristers, advice agencies and community organisations across London, taking referrals and, in some instances, making them.

#### **f** I enjoy how we have a practical. hands-on experience with clients and having the responsibility of figuring out the answers to their problems. **J**

Stephenie Ong, student participant

Jing Ru Gan, a student who took part in the clinic scheme said: 'While drafting an advice letter, the need to present legal research in terms that were more accessible to the client was a challenge that I had to adjust myself to during my time at King's Legal Clinic. However, it was a very rewarding experience, and being able to deal directly with the client was definitely one of the highlights for me.'

Another student participant, Stephenie Ong, credits the experience of working with real clients, adding: 'I enjoy how we have a practical, hands-on experience with clients and having the responsibility of figuring out the answers to their problems. What I really love is also how we have open discussions with Stephen [Clinic Director] on the problems we were facing and what our opinions were on them. What I find most challenging is the stamina required to simplify and distil the information the client needs to know without making it sound technical.'



Fill a big red double-decker bus with students bursting with new ideas, send it on a trip to some of London's most innovative companies and you have the UK's first student 'Venture Crawl'.

> King's Entrepreneurship Institute used this colourful emblem of London to take students on a road trip to the future, stopping to meet start-ups and ventures from across the London tech and innovation sectors along the way.

> Venture Bus stops included multinational companies such as Facebook and Accenture's Innovation Centre, the Royal Academy of Engineering and accelerators Wayra, Geovation and MassChallenge. Students had unique access to enterprise spaces and took part in activities and talks designed to get them to think creatively, be inspired by industry leaders and get feedback about their early stage start-up ideas.

#### Students trialled virtual reality, learned about the use of artificial intelligence in business, and heard pitches from some inspiring start-ups.

During the tour, students trialled virtual reality, learned about the use of artificial intelligence in business, and heard pitches from some inspiring start-ups, asking them questions and learning from their experience.

Also on board were King's alumni and cybersecurity expert Mustafa Al-Basam and Razvan Creanga, co-founder of HackaJob, as well as ventures from King's20 accelerator, the university's year-long accelerator programme now supporting 20 of King's brightest start-ups to reach their potential.

#### **6** King's has the world's top innovators right on our doorstep, so we want to take full advantage of that. Our students are the business leaders and innovators of the future. **J**

Jeremy Shorter, Learning Programme Manager, Entrepreneurship Institute

Following the 12-hour trip Jeremy Shorter, Learning Programme Manager at the Entrepreneurship Institute, said: 'The best way to learn about entrepreneurship and innovative thinking is to experience it first-hand; to meet the people who are creating new jobs and coming up with creative ways to meet society's challenges.

'King's has the world's top innovators right on our doorstep, so we want to take full advantage of that. Our students are the business leaders and innovators of the future. Travelling on the bus gives them the opportunity to interact with each other and exchange ideas as we take them on this unique entrepreneurial journey.'



A new partnership with the Metropolitan Police Service (MPS) and LGC, a leading provider of forensic services, is enabling King's academics to provide new, innovative research to London's policing units.

> Through schemes such as Light it up, which aims to revolutionise the way traces of biological evidence such as blood or saliva are found and identified at crime scenes, King's Forensics will be providing the MPS with cuttingedge research that will help improve immediate and followup analysis of forensic data.

The research will investigate the use of novel 'sensing' molecules that emit different coloured light when coming into contact with body fluids, allowing forensic scientists to quickly find valuable body fluid traces that otherwise may be missed by the naked eye.

Other research areas that will benefit from this new partnership include fingerprint detection, in-depth DNA analysis, environmental forensics and analytical evidence interpretation.

Dr Barbara Daniel, who leads King's Forensics, commented: 'The new partnership with MPS and LGC is helping ensure that we remain at the forefront of forensic research and the analysis of complex casework, while delivering a world-class education to future forensic scientists.'

King's has a long history of working with both police and civilian forensic science practitioners, expanding in 1985 to deliver the first postgraduate course in the discipline to be established in England.

King's Forensics will be providing the Metropolitan Police Service with cutting-edge research that will help improve immediate and follow-up analysis of forensic data.

King's Forensics is home to two world-leading research laboratories: the King's Drug Control Centre and DNA analysis at King's. Internationally renowned for its work in anti-doping control, the Drug Control Centre's laboratory is in the only one of its kind in the UK. DNA analysis at King's is a fully accredited casework laboratory specialising in complex DNA analysis for family relationships and intelligence worldwide. Together the laboratories underpin the university's position as a key research hub for the MPS and other bodies.

The new partnership builds on King's 15-year relationship with the MPS, which over the years has enabled joint research projects and used science and technology innovations to tackle crime in the city and help keep London safe.



Plastic pollution in our rivers, seas and oceans is one of our most urgent global environmental problems, yet it hasn't received the attention or awareness it deserves. But just one glance at the River Thames reveals this to be a very local problem, affecting the river on the university's doorstep.

> Focusing on a stretch of the river from Teddington to the sea, academics and researchers from King's Departments of Geography, Chemistry and Informatics have been working with artist in residence Maria Arceo to draw Londoners' attention to the rising tide of plastic.

Since September 2016, Maria has been gathering up plastic from the banks of the Thames. With the help of volunteers, tonnes of plastic have been collected, cleaned, stored and sifted.

King's Departments of Geography, **Chemistry and Informatics have been** working with artist in residence Maria **Arceo to draw Londoners' attention** to this rising tide of plastic.

The King's project brings together the Royal Society of Chemistry and Arts Council England as part of the Thames Memories and the Exploration of Future Dust series of public engagement activities, in a partnership facilitated by the Cultural Institute at King's. It has involved student volunteers and interns as well as academic staff and the public and has helped to raise Londoners' awareness of the impact of plastic waste on our environment through an art installation and a science hub, the Thames Plastic Lab, as well as workshops with London schools.

The Thames Plastic Lab, situated on the Somerset House River Terrace, invited Londoners to learn what kind of plastic ends up in the Thames, how it gets there, and what they can do about it. Participants were able to explore and analyse the scientific, historic and geographic properties of the gathered plastic, which was displayed in the context of ongoing King's research into the plastics found within the Thames catchment. This research ranges from studies of the microscopic chemical components and biochemical properties of the plastics found in the river, to investigations into its distribution patterns and the wider ecological implications.

The plastic waste being studied by King's scientists will eventually be used by Maria to create a permanent sculpture, serving as a lasting reminder to Londoners of the plastic menace choking the river that flows through the heart of our city. It will also be a symbol of our determination, as a university dedicated to serving the community of which we are a part, to lead the way towards a more sustainable future.

# CONNECTING KING'S with London

Across King's, a number of specialised teams connect King's with London's distinct sectors and communities. The university works with numerous organisations and businesses in London who collaborate with ongoing projects and initiatives.

A newly established cross-university London network, supported by a London office, brings together the various parts of King's that engage with London, providing a focal point for Londonrelated activity and communicating opportunities for King's external partners, staff and students.

#### **Careers & Employability**

The King's Careers & Employability directorate provides a range of services to both students and employers in London. From one-to-one careers discussions and practice interviews to an online vacancy board and a host of resources, the directorate supports King's students, graduates and academics to build, develop and maintain the right skills to transition into the local and global labour markets. careers@kcl.ac.uk | @KingsCareers

#### **Commercialisation Institute**

The King's Commercialisation Institute challenges the traditional commercial transaction approaches pursued by typical university technology transfer offices. The focus is one of active engagement with King's research projects for commercial translation that is better aligned with the needs of London and the world's industries and the markets and which captures the full benefits that new technologies can deliver.

rmidcomms@kcl.ac.uk

#### Culture

Over many years, King's has developed symbiotic partnerships with artists and cultural organisations in London and beyond that enhance the student and academic experience while adding value across the cultural sector. From tailored teaching, training and internship programmes, through innovative research collaborations and enquiries, to exhibitions and public events, these initiatives generate new approaches, new insights, new learning experiences and new networks.

#### **Dean's Office**

When King's was founded in 1829, it was with the express purpose of ensuring that its students received an education that took seriously the religious dimension to life. Throughout the history of King's its Deans have been key people in ensuring this continues. The Dean's Office is the first point of contact for any queries about religious provision at King's, providing support for the student and staff's diverse and cosmopolitan range of religious beliefs.

#### **Entrepreneurship Institute**

The Entrepreneurship Institute exists to support entrepreneurial thinking, skills and experiences amongst King's students, staff and alumni. Working with the city's unrivalled hub of innovative thinkers and business leaders, the Institute supports people to have careers as entrepreneurs and start up innovative new businesses and social enterprises, but also to be innovative in their chosen career.

#### **External Affairs & Government Relations**

The External Affairs & Government Relations function exists to help King's anticipate, analyse and effectively respond to key developments in higher education, research and innovation policy, as well as other strategically relevant issues in the external environment.

#### **Alumni Office**

The Alumni Office aims to develop an active community of alumni and volunteers whose support adds significant value to King's strategic priorities.

The Office delivers a comprehensive event programme which offers alumni the opportunity to attend social, academic and professional networking events in London and elsewhere. A volunteer programme engages alumni through a range of opportunities across King's, supporting students throughout their academic journeys and beyond.

#### **King's Events**

King's hosts hundreds of public events each year covering a wide variety of subject matter, at venues across King's campuses.

#### **Directory of Experts**

The Directory of Experts provides easy access to King's academics, who are able to speak to journalists on a wide variety of subjects.

#### The Policy Institute

The Policy Institute at King's addresses complex policy and practice challenges with rigorous research, academic expertise and analysis focused on improving outcomes. Our vision is to contribute to building an ecosystem that enables the translation of research to inform policy and practice, and the translation of policy and practice needs into a demand-focused research culture.

We do this by bringing diverse groups from London and elsewhere together, facilitating engagement between academic, business, philanthropic, clinical and policy communities around current and future societal issues.

#### **Connected Venues**

King's sits at the heart of one of the cultural capitals of the world. The university is connected to a wide variety of different cultural spaces across and around its campuses. Some are permanent museums with a long and prestigious history, while others provide flexible spaces for staff and students to connect, create and engage with artists and cultural partners.

#### **Widening Participation**

King's College London seeks out and nurtures talent to ensure that our pursuit of academic excellence is enriched by the diverse experiences of our students. Students from under-represented backgrounds in London, the UK and abroad are supported to gain access to higher education through high quality, innovative and effective widening participation schemes.

outreach@kcl.ac.uk |

#### **King's Worldwide**

King's Worldwide is the university's hub for its international activity, helping it to flow naturally throughout everything King's does. It manages and builds partnerships with the world's best institutions, opening up opportunities for collaboration from student exchange to academic research. King's Worldwide also works to ensure internationalisation has a positive impact on students, staff and the institution as a whole.

#### **King's College London Students' Union**

The King's College London Students' Union (KCLSU) was formally established in 1908 and since then has provided students with a voice to inspire change within the university and beyond. Led by Student Officers, Student Councillors and Student Representatives, the union offers the student body at King's a platform to interact and help to empower students to become change makers in London and the world.

#### **King's Health Partners**

King's Health Partners is an Academic Health Science Centre where world-class research, education and clinical practice are brought together for the benefit of patients. The partners, King's College London along with the Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS Foundation Trusts, bring together three of the UK's leading NHS Foundation Trusts and a world-leading university for health research and education to make sure that the lessons from research are used more swiftly, effectively and systematically to improve healthcare services for people in London with physical and mental health care problems.

#### **King's Venues**

With a history and reputation for excellence that dates back over 180 years, King's College London has a variety of venues from traditional to contemporary, iconic to practical. King's Venues is the university's dedicated events and hospitality service, and offers an exciting choice of over 200 unique spaces in central London, next to the River Thames, between London Bridge and the Houses of Parliament.



A new space where art and science collide. Driven by ideas, not objects. A two-way flow of ideas and information between the university and the city.

> Science Gallery London is already all these, and more. Before the physical building opens in 2018 – within Guy's Campus, one of the university's five campuses - the team behind King's newest Gallery have been running experimental pre-opening seasons in pop-up locations across the university and city.

The driving aim for Science Gallery London is for it to be an accessible space, its content provoking discussion and exchange rather than silent reverential contemplation and a place where research is brought, through cultural collaboration, to wider audiences. Its key audience will be young people aged 15 to 25, to encourage them to engage with new ideas.

#### **1** The FED UP workshop was really eyeopening for me, as I am a teenager from a town where new and controversial ideas are rarely emerging. **J**

Lauren Wallis, student participant

Lauren Wallis was 16 when she took part in a Science Gallery London workshop as part of the FED UP season, allowing sixth form students to examine the role of sustainability, sensory experience and perception in determining the future of food. She said of her experience: 'The FED UP workshop was really eye-opening for me, as I am a teenager from a town where new and controversial ideas are rarely emerging, which has caused me to be quite secluded from the incredible discoveries and revolutions that constantly seem to become evident from London. Workshops like FED UP are extremely important in influencing people to change their diets for the right reasons.'

The free-to-visit Science Gallery London will not have a permanent collection. Instead it will present themed seasons that interrogate contemporary challenges by inviting collaborations between artists and scientists. Key to this is its location within Guy's Campus, which will foster a creative and interdisciplinary dialogue between King's researchers, staff and students and artists and the local community.

Professor Brian Sutton from the Randall Division of Cell & Molecular Biophysics at King's College London collaborated with artist Inés Cámara Leret during the MOUTHY season. He said: 'One of the most valuable aspects of Science Gallery London will be its dedicated space for interaction with the public and a focus for high quality engagement.'

King's students will play a vital role in the Gallery as hosts and mediators, developing communication skills and enhancing their employability. Parnyan Ashtari was the first person employed as a Science Gallery London Mediator. She shared her experience working on Bea Haines installation Terminal Sulcus: 'I noticed that when listening to people's perspective in an artistic rather than clinical context, there was no fear and, instead, sensory language flowed.'

Shaping the Gallery's future direction is the Leonardo Group, a diverse and inspiring collection of future thinkers and influencers, drawn from science, technology, the arts, media, education and business. Their range of backgrounds reflect London as the most diverse city in the world. In addition, the university's close connections to King's Health Partners, including Guy's & St Thomas' NHS Foundation Trust, will ensure the Gallery's programming draws on and reflects a broad range of expertise in health and wellbeing.



The London Borough of Barking and Dagenham has experienced some of the most rapid demographic changes of anywhere in the UK. In just 20 years, like much of East London, its predominantly white working-class community has become a multi-ethnic borough. Over the same period it has seen sporadic bursts of support for far-right political parties, and most recently it was one of just five London boroughs to vote to leave the European Union.

> Understanding residents' attitudes to immigration, integration and changing communities is the aim of a qualitative research collaboration now underway between the Policy Institute at King's and Dame Margaret Hodge, the long-serving Labour MP for Barking and Visiting Professor at the Institute.

#### The project's aims are to identify the barriers to cohesion and integration, as well as interventions that could help break down those barriers.

Researchers on the study are carrying out 100 interviews with Barking and Dagenham residents to better understand their experience of change and diversity, and to root this in a wider evidence base on building tolerance and inclusion.

Funded by the Trust for London and the City Bridge Trust, the project's aims are to identify the barriers to cohesion and integration, as well as interventions that could help break down those barriers and bring about greater cohesion and integration at all levels - neighbourhood, local authority and across London.

#### The Policy Institute is ideally placed to link its insightful research with rapid, relevant analysis to stimulate debate and shape future policy agenda.

Building on King's central London location at the heart of the global policy conversation, the Policy Institute is ideally placed to link its insightful research with rapid, relevant analysis to stimulate debate and shape future policy agenda on what is a crucial issue affecting many London communities.

The research collaboration with Dame Margaret - who has referenced her own experiences as the daughter of Jewish refugee immigrants - brings her knowledge of the political process and her deep-rooted engagement with her local constituency to academic research that is intended to have real impact on the people of Barking and Dagenham and beyond.



Most UK cities suffer from traffic-related pollution, but London's high buildings, dense road network and sheer size make our city one of the most polluted places in the country.

> The impact of air pollution on our health and the environment is well documented. While the 1956 Clean Air Act helped rid London of its infamous 'pea souper' smogs, poor air quality remains a significant public health issue. Monitoring data showing that Brixton Road in Lambeth had breached annual legal limits for toxic air just five days into 2017 have added impetus to calls for a new Clean Air Act, to radically improve our city's air quality once again. Campaigners want to see speedier progress on tackling nitrogen dioxide and microscopic airborne particles (particulate matter) that are linked to asthma, lung cancer and cardiorespiratory diseases.

> London's Mayor Sadiq Khan has highlighted the need to tackle air pollution as a priority. His plans include extending the city's ultra-low emission zone beyond central London, while his draft transport strategy published for consultation in June 2017 includes the goal of making London a zero emission city by 2050.

#### **Mayor Sadiq Khan has highlighted the** need to tackle air pollution as a priority.

Many of the city's air quality measures have been informed by research at King's. Indeed, the Environmental Research Group, part of the Faculty of Life Sciences & Medicine, is a leading provider of air quality information and research in the UK. Its widely recognised work encompasses the measurement of air pollution, assessment of its toxicity and impacts on health, whilst output from its research informs both national and international regulatory bodies' policy.

A major report by the Group for the Greater London Authority (GLA) and Transport for London in 2015

estimated that air pollution was responsible for up to 141,000 life-years lost (equivalent to 9,400 deaths) in the capital in 2010, as well as around 3,400 hospital admissions, with a total economic cost of this estimated at up to £3.7 billion. The Group continues to work closely with the GLA and those responsible for air quality management to support policies and actions to minimise air pollution health effects.

#### **A major Environmental Research Group** report estimated that air pollution was responsible for the equivalent of 9,400 deaths in the capital in 2010.

The Group also creates technology to enable Londoners to monitor their exposure, and to understand the impact of pollutants on their health. The technology uses data provided by the Environmental Research Group's London Air Quality Network (LAQN).

Formed in 1993, the network – now the largest in Europe - collects air pollution data from London boroughs and surrounding areas. By analysing this data, the LAQN can assess how bad air pollution is on a day to day basis, and identify the worst areas. It can also see how pollutants interact with each other, and how they relate to traffic density or industrial activity.

The LAQN website, Londonair.org.uk, shares this information with Londoners in ways that can help improve their quality of everyday life in the city. People worried about pollution, or who have health problems worsened by pollution, can access up-to-date information and health advice from Londonair.org.uk, including via a smartphone app. This site offers a street-by-street map of pollution levels updated hourly, an emissions calculator and a route planner based on lower pollution levels.



Getting the right help to 8.5 million Londoners when and where they need it is the everyday job of the London Ambulance Service (LAS).

> Researchers at King's Department of Informatics and the Policy Institute are working with the LAS to explore how new and emergent forms of data could help support the way ambulance dispatch decisions are made – and so help save lives.

#### The project is looking at a range of big data sources that could be made available through technology, such as live traffic feeds, mobile location data and weather tracking.

The one-year interdisciplinary Data Awareness for Sending Help (DASH) project is looking at a range of big data sources that could be made available through technology, such as live traffic feeds, mobile location data and weather tracking. While these all offer great opportunities to support LAS staff in their decision-making, there are also considerable technical – and policy – barriers to being able to make effective use of the data. The DASH project aims to help identify and overcome those barriers.

Led by Dr Elizabeth Sklar, Reader in Computer Science, Head of the Centre for Robotics Research and Director of the Data Science MSc programme in the Department of Informatics, the project will also produce a software prototype to demonstrate the potential impact of new data sources.

Dr Sklar said, 'DASH allows us to explore the potentially far-reaching impact of applying state-of-the-art technologies for dynamic multi-robot routing and data-backed decision making to a real-world problem. In our lab, we have been evaluating strategies for assigning tasks to teams of robots, which is a microcosm of the problem faced every day by London Ambulance dispatchers. By integrating data mining and human-in-the-loop decision making, our approach to DASH will take advantage of cutting edge research and demonstrate a prototype solution. Building this prototype will highlight policy-related issues that currently prevent such systems from being viable.'

#### Researchers are drawing on a range of research fields, from public health to operational management and the psychology of attitudes towards data.

At the same time researchers at the Policy Institute are using interviews, horizon-scanning tools and open policymaking techniques to understand the complex landscape in which the LAS works as it delivers life-saving services. Specialists in translating thoughtful research into actionable policy, the researchers are drawing on a range of research fields, from public health to operational management and the psychology of attitudes towards data, to explore how we can use technology to make services more responsive, both for London's emergency services, so vital to London's wellbeing - and beyond.



London in 1800 was the biggest metropolis in Europe. In the following 50 years it became a global political, financial and trading capital and a hub of creativity and exploration in literature, theatre, art and music. In those decades many of the architectural, educational, scientific and cultural landmarks of today's vibrant city were founded.

> Music in London 1800-1851 is a five-year research project, based in the Music Department at King's, which is attempting to rewrite the history of music in early 19thcentury London, emphasising the city's unique position in European musical culture.

#### The project takes the broadest possible approach to music history.

Funded by the European Research Council, the project takes the broadest possible approach to music history. As well as the expected consideration of concert music, operatic entertainment, chamber and religious music of the time, the research is encompassing less familiar strands. These have included the emergence of popular music, from balladsinging to music hall entertainments; working men's musical organisations; music education among both elite and non-elite groups; the musical press; the emergence of ethnomusicology, and instrument-making and sound production.

Professor Roger Parker, the project's Principal Investigator, explains, 'Past histories of Western music-making have mostly focused on elite culture, and have tended to write about music in relative isolation from the other arts and humanities.

'Our project takes as its focus musical activity in a period and a city which, for both material and aesthetic reasons, offers excellent opportunities for exploring a broader and more inclusive kind of history.

#### The project's originality in method and scope will serve as a model for a new kind of music historiography.

'Music-making in London functioned as a widely-based industry, providing much professional employment and featuring in the education of many an amateur; it also contributed to private and public enjoyment, became a source of boredom and occasional irritation, and fostered the creation of a host of cultural, political and imagined communities.'

A large number of visiting academics are contributing to the project's events, seminars, reading groups and conferences alongside the team of King's scholars, something which enriches the project's multidisciplinary perspective. As the project draws to a close in 2018, it is hoped that the originality of its method and scope will serve as a model for a new kind of music historiography. Such a broad examination of the social and political meanings of music in 19th century society should find fresh relevance for musicology into the 21st century.



City living can be exhausting, but how does it impact on our mental health? Dr Andrea Mechelli, from the Department of Psychosis Studies in King's world-renowned Institute of Psychiatry, Psychology & Neuroscience, is working with landscape architecture practice J&L Gibbons, technology studio A&E and Nomad Projects, the Van Alen Institute in New York and the Research Councils UK-funded Sustainable Society Network+ to develop an app that will help us answer that question.

> The Urban Mind app measures users' experience of city living, collecting real-time data that is helping us understand how different aspects of the urban environment affect our mental wellbeing.

In a pilot study, volunteers provided basic information about their lifestyle and mental wellbeing to the Urban Mind app installed on their smartphones. Participants were then asked to answer a series of questions about their current environment, lifestyle and mental wellbeing seven times a day over the course of a week.

During each assessment participants could also photograph the ground or floor they were standing on, or take a 15 second audio recording of their immediate surroundings. Posting these images on the project's Instagram page encouraged further volunteers for the project.

#### It is hoped the findings will help doctors have a better understanding of patients' stress points.

With the idea of Smart Cities still high on political agendas, the aim of the research has been to help architects, urban planners and policy-makers create a more sympathetic built environment. By measuring how our immediate urban landscape shapes our psychological and emotional state, the project's findings will help doctors have a better understanding of patients' stress points, and influence future social policy aimed at improving design and health.

#### What started in London could one day help city dwellers worldwide.

The project has been informed by Dr Mechelli's work as a clinical psychologist with the NHS in London, where he sees the impact of the built environment on his patients. Its findings have now been collated and will form the basis of an international study this autumn, along with an improved app. What started in London could one day help city dwellers worldwide.



Hospitals are noisy places. This means patients sleep poorly, affecting their experience and recovery, while noise levels also have an impact on staff practices. Yet despite much research over the past 20 years addressing the problem of 'noise', the recommended maximum sound levels for hospitals continue to be exceeded.

> A remarkable collaborative project between the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care and the University of the Arts London, facilitated by the Cultural Institute at King's, offers a fresh perspective on this long-standing problem.

#### The project's aim is to improve the experience of noise and sound within hospitals and to explore ways to reduce its negative impact.

Their collaboration, Hospital Project on Noise, Sound and Sleep (HPNoSS), is attempting to provide a holistic understanding of sound in the hospital environment and the intimate relationship of noise to sleep, rest, treatment and recovery.

The project's aim is to improve the experience of noise and sound within London's hospitals and to explore ways to reduce its negative impact – and thereby to improve the wellbeing of hospital patients and staff. The HPNoSS approach seeks to view the hospital 'soundscape' as a malleable component of the healthcare environment, and one that can have positive as well as negative effects.

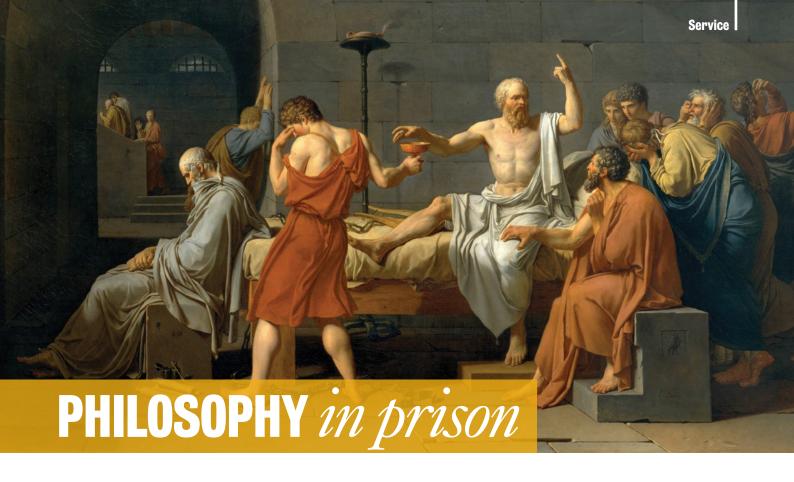
Bringing together academics, artists, engineers, nurses and patient advocates, HPNoSS seeks to raise awareness of the issues around noise among nursing, medical and other hospital staff and is exploring practical solutions that will contribute to staff and patient wellbeing - and potentially improve recovery times.

#### The project seeks to view the hospital 'soundscape' as a malleable component of the healthcare environment.

In recent months, the team has visited various Intensive Care Units across London, observing and recording sound levels. With the cooperation of two tech companies - one specialising in sound masking and the other in noise-cancelling - these recordings will be used in an experimental workshop and symposium exploring participants' perceptions of a multi-channel recreation of hospital soundscapes and possible strategies for reducing its negative effects.

In a simulation ward setting normally used for training purposes, participants will be asked to listen and interact with the recordings, and to judge which interventional techniques or combination of techniques might make the soundscape more acceptable. It is hoped that the symposium recommendations and positive soundscape components will be developed and then tested in the clinical environment.

The result could eventually help to ensure patients in London's hospitals get a good night's sleep.



In 2016, the King's Department of Philosophy piloted an eight week philosophy course for prisoners at HMP Belmarsh in south-east London.

> With the support of Professors Bill Brewer and MM McCabe, Mike Coxhead (PhD candidate and Visiting Research Fellow in the Department), Andy West (senior specialist at The Philosophy Foundation), and Andrea Fassolas (honorary therapist at the Guild of Psychotherapists) developed and delivered a course of discussion-based philosophy classes. Content included personal identity, freedom, time, scepticism, the ethics of belief, mental health, and topics in moral philosophy. Classes were delivered based around The Philosophy Foundation's method of philosophical enquiry.

> The course aimed to offer participants a safe, non-adversarial environment in which to discuss, articulate, and critically reflect upon their opinions and experiences; an introduction to philosophical thought and theories as a way of seeing the world; and an opportunity to re-engage with education in an environment aimed at exploration and self-development, without the spectre of examination. Attendance was voluntary and averaged at 90 per cent with a zero per cent dropout rate.

#### The course aimed to offer participants a safe, non-adversarial environment in which to discuss, articulate, and critically reflect upon their opinions and experiences.

Importantly, the course was designed to be accessible to participants with a broad range of educational backgrounds. Whilst 40 per cent of the cohort had undertaken some form of higher education, 30 per cent had either finished formal education at school or had no formal qualifications whatsoever. In addition, 40 per cent were English as a

Second or Other Language (ESOL) learners. Consequently, content was delivered conversationally and literacy was not a requirement.

Members of the group expressed in feedback how much they enjoyed the course. For some, it was the highlight of their week, offering a stimulating educational environment in which to discuss challenging and complex ideas. One participant identified the course as a way into what he termed 'highbrow' education and 'an upper-class subject'. Another had been inspired to start reading again. Many reported that they valued being part of structured and open-ended group discussions, in which they could both listen and be listened to. Participants also reported a positive impact upon their mood and sense of self. For some it improved their social lives, creating a sense of belonging within the group and fostering new relationships outside the classroom. It helped others come to terms with their own situation, providing a new opportunity in which to think and reflect.

#### Participants also reported a positive impact upon their mood and sense of self.

In 2017, two further courses are being delivered with support provided by both the Faculty of Arts and Humanities & the Evan Cornish Foundation: a re-run of the pilot course and a new course designed specifically for ESOL learners. The university is currently considering how to continue, evaluate, and expand the project for the future.



Armed with giant toothbrushes and enormous pink and white plaster casts of teeth, members of King's College London SMILE Society are educating local children about why they need to keep their teeth clean - and why dentists are nothing to be afraid of.

> A third of all children starting school each year have signs of tooth decay, and tooth extractions are the biggest reason children are admitted to hospital for general anaesthetics in the UK.

Simple measures can make a big difference – brushing twice a day, using a good fluoride toothpaste, spitting rather than rinsing, and cutting back on sugary drinks can all help reduce decay. These are the simple, achievable messages that the SMILE Society is taking into London's schools.

#### A third of all children starting school each year have signs of tooth decay.

Run by King's dental students as a non-profit-making charitable organisation, the SMILE Society's aim is to educate children about oral hygiene and healthy living and to encourage preventative dental care, so that as adults they can benefit from good oral health. The sessions also help diminish fear of the dentist - crucial during childhood and adolescence - while providing a comfortable environment in which to ask questions. Activities are carefully aligned with the oral health promotion strategies of local London boroughs, true to our belief that collaborative working is the best way to achieve long term impact.

Our dental students are part of King's world leading Dental Institute, the largest dental training school in the UK. They benefit from the university's partnerships with three prestigious London teaching hospitals - Guy's, King's College and St Thomas' hospitals.

#### They are bringing King's commitment to service to life, with a smile.

In turn, serving the local London communities through the SMILE Society helps our dental students gain the essential communication and patient management skills they will need as future clinicians. Volunteering in this way makes them aware of wider public health issues and enables them to engage with the people they are being trained to treat. They are bringing King's commitment to service to life, with a smile.

Tripat Mahajan, 2016-17 Co-President of the SMILE Society, says: 'Dentistry doesn't have the best public perception, so we work with the local community and local schools with children to promote good oral health'. Sarita Kang, 2016-17 Co-President added: 'A lot of children that we work with haven't actually been to the dentist ever - and that's quite shocking at the age of eight so it's really important that we go there, and make them comfortable. And it's really good experience for us as dental students as well.'



What will university life be like? What is the best course to apply for? Deciding whether to go to university can be a daunting decision, especially for students with no history of higher education in their family.

> King's flagship widening participation programme, K+, aims to support students aged 16 and over who attend non-selective state schools or colleges across London and Greater London. K+ is a structured two-year programme of events and activities designed to equip students with the knowledge, confidence and skills they need to succeed at university and beyond.

The K+ programme, one of a number of initiatives delivered by King's Widening Participation team, uses London as a classroom, giving students learning experiences in places such as the Museum of London, the Royal Courts of Justice and the Royal Observatory, as well as in the lecture theatres and classrooms of King's.

#### K+ is a structured two-year programme of events and activities designed to equip students with the knowledge, confidence and skills they need to succeed at university and beyond.

Students also learn and practice key study skills, complete an academic project, take part in taster lectures and academic masterclasses, and attend the K+ Spotlight Summer School. A current King's student offers one to one support as an e-mentor, while additional support and guidance over the two years includes advice on applying to and preparing for university, careers advice and work experience opportunities.

To be eligible, students must have achieved at least eight A\*-C grades at GCSE or equivalent, including English Language and Maths. Their parents must not have attended university in the UK or abroad, and interest is encouraged from students who live or have lived in local authority care, are young carers themselves, or who are disabled.

#### For many graduates, their first steps towards reaching their academic potential and realising their ambitions for a brighter future began with K+.

K+ does not guarantee students a place at King's, but students who successfully complete the programme may be eligible for the K+ variable offer for certain subjects at King's, worth up to two A-level grades lower than the standard offer.

Over the years many K+ students have gone on to study successfully at King's – but also at other London universities and across the UK. For many graduates, their first steps towards reaching their academic potential and realising their ambitions for a brighter future began with K+.

Paul Nguyen, a student on the Maths & Computer Science stream, commented on his experience on the K+ programme Spotlight Summer School: 'This week, I've learned to rise to challenging work that I have no experience in. This was a big eye-opener for me as usually I am taught things that relate to what I know. This was great to learn as at uni and in the real working world I will face new challenges. If you could, make K+ longer!'



In a community centre in Battersea, South London, King's student volunteers are helping children with their homework.

> The students are part of KCL STAR (Student Action for Refugees), one of the most active societies at King's, and the youngsters, ranging in age from five to 14, are from refugee backgrounds. Many of them have no one to help them with their schoolwork. Often their parents do not understand the school curriculum or the English education system, and are unable to speak, read or write enough English to be ahead of their children in their learning.

#### Often their parents do not understand the school curriculum or the English education system.

Twice a week, KCL STAR volunteers help at the homework club, supporting the children with their English and school work, as well as with arts and crafts, sports, cooking and fun activities. The sessions provide the children with invaluable opportunities to increase their social confidence, as they mix with a different range of people and are exposed to new experiences.

Alongside this, KCL STAR volunteers run an outreach programme at a London school to help recently arrived students with their GCSE and A-level qualifications, as well as hold collections and run events to campaign for the welfare of refugees living abroad, and the rights of asylum seekers in the UK.

#### For the KCL STAR volunteers, serving their local communities goes to the heart of what it means to study at King's.

For the KCL STAR volunteers, responding to the global refugee crisis through serving their local communities goes to the heart of what it means to study at King's. They are bringing to life a founding ethos of King's, which is that of service to others; to use and disseminate knowledge to help change lives and make the world a better place.

Aside from KCL STAR, King's students are helping refugees to make London their home through a variety of learning initiatives. For example, the Learning Station Project, set up by Lola Siran and Emma Yagour, who are both studying English Law and French Law at King's, offers English and French classes to asylum seekers and refugees in a relaxed and welcoming environment. Students come mainly from Sudan, Syria and Eritrea. In the first six months, attendance has risen to 50 students who regularly attend the Monday lessons and word-of-mouth has allowed more students to discover the classes. Students are split into different groups, depending on their level of English and each group is taught by a King's volunteer. Visits to exciting London attractions and football matches are also organised periodically.



Universities know that their alumni are often their best ambassadors and advocates - not just as they go out into the world as new graduates, but through life as they build their careers and professional networks. For graduates, a continuing connection with their alma mater can be a lifelong source of support and friendship – a symbiotic relationship that adds value to the university, too.

#### **Leadership mentoring**

King's Leadership Mentoring Programme pairs current students with King's alumni who can inspire and support.

For this programme, our focus is on alumni based in or around London who hold senior or advisory positions in their professional fields. Leadership Mentors are also key supporters of the university, participating in different initiatives across campus.

Since the initiative started in September 2015, almost 100 pairs have taken part. The programme has connected King's to new venues around London, introducing students and alumni to key locations and areas that are making an impact on London life.

Mentoring exposes students to the world beyond the classroom. They experience the workplace environment and benefit from the knowledge of professionals established in their field. For their part, alumni mentors say they are inspired by the quality of King's students, their drive and ambitions.

One mentor said: 'Getting to know different people and being able to pass on my experiences; feeling that my help has added value - this has all been enormously satisfying for me.'

Mentees appreciate the practical help their mentors can give them, saying: 'He encouraged me to widen my job search and pointed me to areas I did not think of before. I now have a clearer idea of working environments and eligibility criteria.'

'The best part about my mentoring experience has been meeting someone in the profession and being able to form relationships that wouldn't have been possible without it.'

#### **Alumni Advisory Group**

Gaining the support of our alumni for our strategic goals is vital to us. We need the engagement, advocacy and enthusiasm of our London-based alumni if we are to truly leverage the potential of our location in the heart of London.

King's is building on our commitment to, and connectivity with, our alumni community through our London Alumni Advisory Group. Our aim is to build strong relationships with entities headquartered in London, and deliver benefits to local communities through these connections. With this in mind, Group members are seeking out and engaging with former King's students working at a senior level in key industries in London, including business, government, culture and entrepreneurship.

The group's chairwoman, Diana Garnham (War Studies, 1979), said: 'King's alumni reach all parts of London's society, governance and enterprise. Their experience, goodwill and networks can make a vital contribution in delivering King's future strategy and I am looking forward to helping play my part in making that happen'.



Established in November 2015, the King's Commission on London is a two-year study looking at the future challenges and issues facing London and their possible solutions - taking a longer term, 15 year, perspective. The aim of the Commission is to provide substantive, evidence-based recommendations on how London can be more liveable, sustainable, productive, healthier and inclusive, and better connected.

> The project is steered by 22 Commissioners and chaired by Lord Adonis, former Cabinet Minister and Transport Secretary. The members of the Commission include representatives of London businesses, government, academics, both within and outside King's, and think tanks.

> **1** The Commission will... propose realisable policy solutions to take London as a global centre into the 2020s and beyond. These should help keep London the success it should always be. 5

Professor Halmos, Director, King's Commission on London

The Commission's work has three core elements. The first will model the capital's economic prospects over the next 15 years, and identify various scenarios for London in this period. It will examine economic, demographic, employment and trade-related factors and aim to map numerically how these factors could change under each of the specified scenarios.

The second element, starting from these scenarios, will explore London's health care needs and outcomes and the policy changes that could best improve these outcomes. This will examine how London differs from other cities, how health can be a barometer for the state of London more widely, what a healthy city could and should look like, and how our health can gain from full use of the development of digital - or smart - cities.

The third element focuses on post-16 non-university education and skills in London. This will encompass not only the implications in London of the new apprentice levy, but also the role over the next decade of further education colleges and where changes should be made to ensure that they can achieve their maximum potential. It will examine the scope and advantages of further devolution to London of policy-making and implementation in this area.

Professor Tony Halmos, Director of the King's Commission on London and a Visiting Professor at the Policy Institute at King's said, 'London has always faced major challenges to its world class status. The Commission will provide a comprehensive opportunity not only to examine these challenges, but to propose realisable policy solutions to take London as a global centre into the 2020s and beyond. These should help keep London the success it should always be.'

The Commission plans to publish a final report in late 2017.

The London Commission is funded by the City of London Corporation, Sir Harvey McGrath, British Land and Arup.



For any world-class sporting event, a world-class anti-doping programme is essential. Nowhere is this more so than at the Olympic Games, where scrutiny is at its highest and integrity is key to the Olympic spirit.

> In collaboration with GlaxoSmithKline, King's state-of-theart Drug Control Centre delivered the anti-doping analysis at the London 2012 Olympic and Paralympic Games.

> Chosen to lead the operation because of its cutting-edge bio-analytical research in drug control, King's work at the Games was characterised by unprecedented scale, speed and accuracy. The round-the-clock operation, undertaken in the university's World Anti-Doping Agency accredited laboratories, succeeded in protecting the health of athletes and the integrity of the London Games, contributing greatly to its success.

> Although a number of athletes were disqualified in the pre-Games testing, the deterrent effect of the work at King's was evidenced by the few doping cases during the Games itself. Using a new biomarker test developed at the King's Drug Control Centre in collaboration with colleagues at the University of Southampton, the team identified for the first time the administration of recombinant human growth hormone in two athletes.

The findings of the 2012 King's-led operation have also opened up the science of drug testing to schools through the Scientists in Sport initiative.

Putting knowledge and experience gained in London to use internationally, King's Drug Control Centre worked closely last year with partner Universidade Federal do Rio de

Janeiro (UFRJ) and its Laboratório Brasileiro de Controle de Dopagem (LBCD) to develop similar testing facilities for the 2016 Olympic Games in Rio de Janeiro.

Professor Francisco Radler de Aquino Neto, Head of the LBCD, said the lab provided an academic space for professional excellence, and had led to close collaboration and sharing between the two universities. Since the Games finished, that collaboration has continued, not only on anti-doping issues, but on other research and development opportunities.

Led by Professor David Cowan and supported by a team of experts, the Drug Control Centre at King's is at the forefront of research into the detection of drug abuse in sport, taking the lead in changing the way in which anti-doping analysis is carried out both in the UK and internationally.

'Because samples are stored now for up to 10 years, we can go back retrospectively and look at those samples using the new methodologies. If you're taking a drug today we may not catch you today but in 10 years' time - we may catch you then,' said Professor Cowan.

'I think scrutiny is excellent. It's bad when sport appears to be tainted by drugs –and that's what we are fighting against. Our goal is to deter drug misuse.'

The findings of the 2012 King's-led operation have also opened up the science of drug testing to schools through the Scientists in Sport initiative. The outreach programme, launched in collaboration with GlaxoSmithKline, comprised a series of free events during the 2012 Olympic and Paralympic Games, offering local school children the opportunity to experience a day at university and through a series of sports-based lectures and interactive workshops aimed to encourage 11-14 year olds to take their science studies further and consider a career in science.

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# It's our deeds that define us.