What London’s universities do for London
WHO WE ARE
London Higher is the membership body representing over 40 higher education institutions (HEIs) in London. Our members range from some of the UK’s largest multi-faculty institutions to specialist institutions. All are linked by a commitment to excellence, serve the needs of society and students, and are headquartered in London.

ABOUT THIS PROJECT
Throughout 2019 London Higher has collated case studies from across our diverse membership in order to showcase the vast contributions London’s universities make for, and to, the Capital. On the following pages each case study has been catalogued.

The catalogue is intended to be a resource for London’s policy makers, influencers and stakeholders which will demonstrate the breadth and reach of our members’ activities and provide examples on how each HEI impacts London, across the diversity of the sector. Each case study has been categorised by theme, aligned with the priorities of the GLA, for ease of use and clarity. The catalogue will be updated regularly.

ABOUT LONDON HE
London is home to a unique cluster of HE institutions (HEIs) who together are a powerhouse of research, teaching and technology unrivalled anywhere nationally and internationally. Collectively HEIs in London:

- Generate £17bn each year in goods and services, including £2.9bn in export earnings;
- Support 172,000 jobs at all skill levels;
- Educate 382,000 students, 16% of all HE students in the UK;
- Employ over 93,000 staff, a fifth of the UK HE total;
- Win over £538m, a third of the total funding from Research England;
- Attract 115,000 overseas students, a quarter of all those in the UK;
- Produce over 130,000 skilled graduates every year, 70% who work in London.

LONDON’S HE IMPACT
London’s HEIs are not just dedicated to their research and teaching excellence but their impactful contributions to their local communities, the arts and heritage sectors, healthcare sector, creative culture, business and industry, skills development and the local economy. Collectively they:

- Contribute through volunteering and free legal advice and healthcare clinics in London boroughs;
- Secure over £11m for local regeneration projects;
- Engage with over two million people at their public events and seminars;
- Deliver over one million learner days in continuing professional development and continuing education courses;
- Engage with 75,000 London pupils each year at campus visits and summer schools;
- Generate a regional Gross Value Added (GVA) of over £7.9bn to London.
THE CATALOGUE

Thank you to the following member HEIs who submitted case studies to be included in this initiative:

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This catalogue will be updated regularly and is available on our website www.londonhigher.ac.uk. Please note that London Higher members submit their own case studies to the catalogue, and as such, are self-regulated.

To make a submission to the catalogue please contact press@londonhigher.ac.uk.
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<td>City, University of London academic outlines the importance of sustainably protecting London’s skyline from climate change.</td>
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**Areas:**
- Arts & Culture
- Communities
- Housing & Land
- Education & Youth
- Volunteering
- Health
- Research & Analysis
- Regeneration
- Business & Economy
- Transport
- Environment
- Skills & Employment
- Policing & Crime
- Planning
<p>| IMPACT 34 | Socially-oriented approaches to mental health recovery for African and Caribbean men |
| IMPACT 35 | London BioScience Innovation Centre (LBIC) |
| IMPACT 36 | Inside Science: reaching out to interest prisoners in science subjects |
| IMPACT 37 | Primary Practice: giving children their first experiences in medical education |
| IMPACT 38 | “Test n Treat”: Exploring whether providing rapid on site tests and same day treatment could help to reduce rates of chlamydia among further education students |
| IMPACT 39 | Inspired not tired. Celebrating ageing at Trinity Laban Conservatoire of Music and Dance. |
| IMPACT 40 | Research into how social welfare law problems can damage health, and how doctors and lawyers can work together to help make people better |</p>
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<td>IMPACT 48: Thousands of UCL students volunteer to assist Londoners</td>
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<td>IMPACT 49: Capturing the past</td>
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<td>IMPACT 53: Metropolitan Police Service CCTV investigation using ‘Super-recognition’</td>
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<td>IMPACT 56: University of Roehampton’s partnership with HMP Belmarsh: Impact on Prisoners and Students</td>
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<td>IMPACT 61: The Regent Street Cinema</td>
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<td>IMPACT 62: The Pyramid Clubs</td>
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<td>IMPACT 63: Addressing Rape Myths in Policing</td>
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<td>IMPACT 64: Regeneration in East London post 2012 Olympics</td>
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<td>IMPACT 65: Prevention of healthcare associated infections in NHS hospitals (Epic 3)</td>
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<td>IMPACT 66: The Street Gang Agenda</td>
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<td>IMPACT 68: Non-destructive testing</td>
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<td>IMPACT 69: I-Hydrate overview</td>
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**In alphabetical order of institution:**

**BIRKBECK, UNIVERSITY OF LONDON**

**IMPACT 1: Examples of Birkbeck’s contributions to London Theatre**

At Birkbeck, theatre research and practice enables Londoners to explore and discover more about the world around them, under the direction of the Centre for Contemporary Theatre. One significant current collaborative project, particularly fostered by Birkbeck’s Louise Owen, is Camden People’s Theatre’s *Human Jam* (2018-19) - a performance investigating the impact of the HS2 development on the Euston area, including the largest disinterment of bodies in European history.

Our work also provides opportunities for public audiences to access rare visits from international artists - for example, the *Depicting Donbas symposium in April*, which enabled Londoners to hear from researchers exploring the war in Ukraine, and to witness performances by Ukraine's Theatre of Displaced People. The international director of the Royal Court, Sam Pritchard (a graduate of our MFA in Theatre Directing) was in attendance at Depicting Donbas performances and will be commissioning a new play from one of the playwrights whose work was featured. And this has launched conversations about possible future collaborations between Royal Court, the Centre for Contemporary Theatre, and the idea of a Russia/Ukraine/UK playwriting exchange.

The Centre has also seeded projects that have toured internationally, such as *Dickie beau’s Re-Member Me*.

Birkbeck's MFA in Theatre Directing (Rob Swain) has directors on secondment to the Lyric Hammersmith, and to the Globe and to Hampstead Theatre from August 2019. Its graduates include the artistic directors of the Unicorn, Clapham Omnibus and the Playground, and associate directors of the Royal Court, the National Theatre and Everyone's Talking About Jamie. In addition, Rob Swain devised 'The Directors Studio' workshops in 2015 for the Globe, which he runs twice a year, and (in collaboration with Tom Mansfield) produced and distributed the Birkbeck/Jerwood *Rehearsal Space Survey*: which provides invaluable and up-to-date information about performance rehearsal space across London which is widely used by directors and other performance practitioners.

For 5 years Dr Gillian Woods has hosted termly *‘Shakespeare Teachers’ Conversations’*, benefiting London schools by bringing teachers and other educationalists into conversation with university lecturers.

Birkbeck playwrights David Eldridge and Colin Teevan have brought their critically acclaimed work to theatres such as the National Theatre (*Eldridge, Beginning*), the Young Vic (*The Emperor, Teevan; Teevan, Kafka’s Monkey*), the Barbican (*Teevan, Peer Gynt*) and the Globe (*Eldridge, Holy Warriors*), amongst others.
IMPACT 2: The Layers of London: Mapping the city’s heritage

A partnership involving Birkbeck, University of London, The British Library, Historic England, The Institute of Historical Research (part of the University of London’s School of Advanced Study), London Metropolitan Archives, Museum of London Archaeology, and The National Archives has undertaken a major digital public engagement and education project: 'Layers of London: mapping the city’s heritage'. The project has received significant funding from the National Lottery Heritage Fund (NLHF).

The 'Layers of London' project brings together, for the first time, important digitised heritage assets provided by key partners across London. These are linked in an innovative new website which allows the public to create and interact with many different 'layers' of London's history from the Romans to the present day. These include historic maps, images of buildings, films as well as information about people who have lived and worked in London over the centuries. Extensive volunteer, internship and schools education programmes in the London boroughs enable individuals and groups to create and upload new content to the website, including photos, film clips, personal memories, and audio recordings which can be linked to the maps. In doing this the project seeks to preserve and uncover the heritage and histories of London and its inhabitants and places over the centuries. Through its many collaborations and partnerships the project acts as a hub for new and existing heritage projects across London.

The heritage assets contributed by the partners are incomparable sources of evidence and knowledge of all aspects of the history of London; they provide aesthetic, architectural, historic and scientific information on the city and its people; and they have unique social and community value as records of everyday life, work and culture in the capital. The project unlocks the potential of this heritage for stimulating large-scale heritage engagement across London at a time of unprecedented change for the city, whether in its communities, its economy or in the physical environment.
IMPACT 3: A new model for ambulance movement in London

Short ambulance response times are a key factor in improved clinical outcomes: the survival rate for out-of-hospital cardiac arrest (OHCA) incidents falls by 10% for every minute between collapse and the commencement of emergency life support. As such, the UK’s ambulance services operate to regulatory targets based on their response times. For example, they are required to reach at least 75% of OHCA patients within 8 minutes and 95% within 10 minutes.

This is particularly difficult in London. The London Ambulance Service (LAS) operates across a region with the highest population density in the United Kingdom: 8.77 million people inhabiting an area of approximately 1,572 km$^2$. This population distribution is associated not only with a high number of medical emergencies but also with traffic congestion that presents specific challenges to ambulance movement across the city.

Between 2010 and 2018, Birkbeck researcher Marcus Poulton and his PhD advisors George Roussos (Professor of Pervasive Computing in the Department of Computer Science and Information Systems) and David Weston (Lecturer in the Department of Computer Science and Information Systems) worked with the LAS to address this problem. They used modern data-driven computing techniques to capture mobility patterns across the city in a new model which is tailored specifically to emergency vehicle traffic. Ambulances can take routes that civilian vehicles cannot (for example, they can make right-hand turns where civilian traffic is forbidden from doing so) and existing systems did not reflect these differences. Roussos and Poulton developed a multi-layer graph model using GPS data collected from ambulances on the road, which allowed them to develop accurate estimates for travel speeds over particular road segments at different times of the week. This new model is over 80% more accurate than alternative tools (for example, the industry-leading Google Distance Matrix API) in predicting the time taken by an ambulance crew to reach an emergency incident.

Roussos and Poulton used their new model as the basis for two software tools to be used at LAS: the QUEST Simulator and the Geotracker. The QUEST Simulator provides an accurate simulation of ambulance movement which allows the LAS planning department to assess the probable impact of new policies or response strategies on service delivery. Accuracy is crucially important here as information gathered from the simulator will inform high-level strategic plans. Conversely, the Geotracker is used by LAS shift leaders to make real-time decisions about the deployment of ambulance crews. It is a visualisation tool which provides a ‘heat map’ of ambulance coverage and allows operators to see where there are gaps which need to be filled. This tool in particular has garnered praise from LAS staff, who were previously restricted to a text-based information tool which was perceived as being unreliable and was consequently rarely used. In interviews with Poulton, staff described themselves as “running blind” before Geotracker was introduced.

More information:
https://www.ordnancesurvey.co.uk/docs/case-studies/london-ambulance-service-geotracker.pdf
BRUNEL UNIVERSITY LONDON

IMPACT 4: Innovation for sustainable airports

Brunel University London has always focussed on addressing society’s challenges on a global scale whilst remaining rooted in the communities it serves. It is no surprise that Brunel is a signatory to the Civic University Agreement and takes very seriously its dual role as an educator and supporter of innovation in London. This case study showcases how Universities like Brunel can act as catalysts for innovation and economic growth through bringing together major organisations, their supply chains and Government as effective consortia to exploit collaboration with the research base.

In autumn 2015, the UK Government announced Science and Innovation Audits (SIAs) as a new approach to regional economic development. SIAs enable local consortia to focus on analysing place based strengths and identify mechanisms to realise their potential. Led by Brunel University London, a consortium including partners representing LEPs, SMEs, universities, research organisations, business & trade organisations, industry, and local and national government was formed in 2017 to focus on our strength in Sustainable Airports. This SIA differed from previous examples in that it takes a whole ecosystem approach around a specific business, London Heathrow Airport, recognising it as an ‘Anchor Business’ for the 400 businesses that come together to operate Heathrow and their supply chains. The study focussed on four themes; Sustainable Construction, Big Data and Cyber Security, Operational Excellence and Intelligent Mobility.

The study produced a major report which included a broad-ranging analysis of West London and its immediate surrounding area’s capabilities, the challenges and the substantial opportunities for future economic growth. The study also highlighted the importance of the aviation sector to the economy. However, four main challenges have been identified, which if addressed would ensure that the research and innovation excellence in the region is harnessed to guarantee that innovative technologies for future airports are developed, and then translated into increased productivity, increased exports and economic growth.

The SIA also identified a range of strategic opportunities including:

- The establishment of a research / innovation centre to address future sustainable airport challenges
- The need for collaborative incubation and innovation facilities close to the airport

The real power in this study was however the development of an effective consortium of partners dedicated to driving forward research and innovation to deliver sustainable economic growth at Heathrow Airport and around the world. Heathrow and all the partners are committed to advancing the opportunities that have been identified showing how Universities can act as catalysts for truly ground-breaking approaches to the Capital’s challenges.

You can access the report and more information on the challenges and opportunities it has highlighted, as well as the membership of the consortium, by visiting: www.brunel.ac.uk/business/sia

Project Lead: Professor Geoff Rodgers Vice-Provost Research, G.J.Rodgers@brunel.ac.uk
CITY, UNIVERSITY OF LONDON

IMPACT 5: City, University of London academic outlines the importance of sustainably protecting London’s skyline from climate change.

Titled as the financial, cultural and business capital of Europe, it is no surprise that London plays home to more skyscrapers than any other city in Europe.

Like most capitals, industry is continually growing, epitomised by the planned or under construction 510 tall towers all more than 20 storeys high, to come to London during the next decade. These structures will no doubt please the eye with cutting edge architecture and unique design. Yet, slender tall buildings become susceptible to wind-induced vibrations which can cause seasickness to building occupants, even under moderate wind intensity. Such effects increase the risk of downtime due to loss of building functionality incurring potentially significant lifecycle losses to building users and owners. Thus, ensuring occupants comfort levels are met under wind action becomes a dominant design requirement in tall buildings, governing their level of slenderness, materials usage, and, ultimately, sustainability in construction, especially against wind-induced forces, which could increase with climate change.

Racing against climate change
Sustainable construction and the fortification of skyscrapers against climate change is at the forefront of Senior Lecturer in Structural Engineering, Dr Agathoklis Giaralis’ research, where he suggests that skyscrapers could be built with technology found in Formula 1 cars.
Dr Giaralis’ research puts forth lighter weighted ‘tuned mass dampers’ (TMDs). TMDs are devices placed at the top of a structure absorbing kinetic energy from the building’s movement through a pendulum, counteracting strong winds or earthquakes.

Dr Giaralis proposes that the current TMDs, which cost up to £3 million and on average weigh more than 300 tons and up to 1000 tons, are combined with an inerter device which is found in suspension systems of Formula 1 cars, ensuring drivers comfort and handling, achieving more affordable and sustainable ways to alleviate wind-induced oscillations enabling ever-more slender structures that meet occupants comfort requirements. The resulting tuned mass damper inerter (TMDI) device uses a spinning disk driven by a set of gears that rotate to counter-balance building movement.

Detailed computer-based simulations for a recently completed 50-storey tower in London developed in collaboration with the London-based structural designing company AKT-II, demonstrated that Dr Giaralis’ TMDI device, can achieve same structural performance to wind action with up to 60% less weight compared to conventional TMDs.

Further computational work undertaken at City by Dr Giaralis’ group demonstrated that coupling the TMDI with electromagnetic motor devices, enables the creation of usable electric energy from tall building’s wind-induced oscillations, using a gearbox similar to those found in car transmission systems.

Ultimately, Dr Giaralis’ TMDI device with gearbox and energy harvesting capability enables ever-more slender designs in the sustainable construction of tall building. The potential impact of London’s skyline will no doubt excite the capital’s leading architects, but sustainability is key in Dr Giaralis’ research, protecting the city’s buildings from the changing weather which may come from climate change while transforming high winds into green energy.
City in partnership with St Bartholomew’s and the Royal London Hospitals and Great Ormond Street Hospital for Children has created innovative optical sensing solutions for the non-invasive and continuous monitoring of blood oxygenation of critically ill patients. Researchers at City’s Biomedical Research Centre have developed optical and fibre optic sensors that allow doctors to monitor the oxygenation of blood in specific organs or tissues within the body, paving the way for very sick patients to receive more reliable and appropriate treatment.

Building on advances in the miniaturization of optical and fibre optic sensors, the research tackles the current inability of clinicians to monitor organ blood oxygen levels as conventional technology requires measurements to be taken from peripheral parts of the body, which often give rise to inaccuracies as blood flow may be restricted to the extremities in certain circumstances within patients.

The new sensors can be applied through non-invasive or semi-invasive procedures to specific organs such as the oesophagus, bowel, liver, colon, as well as the scalp in newborns, to directly monitor the wellbeing of certain organs, tissues or other parts of the body.

The research is led by Professor Panicos Kyriacou and his team, with all sensors and instrumentation designed and fabricated at City’s Biomedical Research Centre.

**Benefits for doctors and patients**

Following clinical trials at the collaborating hospitals these new sensors have already benefited a large number of patients, including children and babies. Better monitoring of patients has meant improved diagnoses and resulting treatment, better peace of mind for patients and, in the case of babies, parents. For the first time, clinicians have been able to observe oxygen levels in specific organs in real time during operations, revealing their state of health before and after the surgical procedures. The new sensors have also meant more cost-effective healthcare and have even helped provide a better understanding of chronic diseases and medical practice generally.

**Commercialisation**

The work has also pushed the limits of current design capabilities for optical and fibre optic sensors, and with these sensors still in use within the NHS, clinicians have said equivalent commercial medical devices do not yet exist.

The completion of clinical trials paves the way for commercialisation of the sensors, and the technologies have attracted the attention of several medical device manufacturers, with discussions on collaborations now underway.

The advances made in miniaturisation of optical and fibre optic sensors being achieved at City are driving significant benefits for the healthcare industry, doctors and their patients. Improving the accuracy of diagnosis and the targeting of treatment boosts the health and wellbeing of patients, while reducing the costs of providing effective healthcare. The technology means greater peace of mind for parents of children undergoing treatment and it is helping to drive new understanding of unresolved chronic diseases.
IMPACT 7: Director of the Centre for Food Policy at City, University of London leads the fight against child obesity in the capital

Nearly 40 per cent of children aged 10 and 11 in London are classed as overweight or obese. In adulthood, London has higher rates of obesity compared to other global cities like New York, Sydney, Paris and Madrid.

The rise of childhood obesity also shows a disparaging gap affecting poorer communities, where children from deprived backgrounds more likely to grow up obese.

These are the challenges facing Professor Corinna Hawkes, Vice-Chair of Mayor of London, Sadiq Khan’s Child Obesity Task Force, which aims to halve the percentage of children who are overweight at the start of primary school and obese at the end of primary school, and bridge the obesity gap in underprivileged and privileged communities by 2030.

As part of the group, Professor Hawkes has worked closely with the Taskforce Members and the Chair, Paul Lindley OBE, to lead the writing of the Taskforce’s Action Plan, which will be published in July 2019.

The Plan has been built on sustained and in-depth engagement with the many people in London involved in tackling childhood obesity, including the Assistant Directors of Public Health, local authority obesity leads, NGOs, and Guys and St Thomas’s Charity.

The Centre for Food Policy
‘Food policy’ comprises the policies that influence and shape the food system – everything and everybody involved in producing, storing, packing, processing, distributing, consuming and disposing of food. The world is facing major food system challenges all locally, nationally and globally. The Centre for Food Policy works to design integrated and inclusive food policies which tackle these challenges facing food systems.

The Centre, which was founded by Professor Tim Lang, has worked with Tower Hamlets, Preston, City and Hackney, Haringey, Cabinet Office and the Office of the Prime Minister’s Policy Action Teams.

In London, alongside a number of Local Authorities the Centre mapped fast food sellers’ proximity to schools and communities. One project identified that in Tower Hamlets there was a high concentration of fast food outlets around schools, outnumbering healthier outlets five to one. This research has influenced Tower Hamlets Council on spatial planning decisions and informed Public Health England guidance on the location of fast food operators.

On a national scale, the Centre has also produced research estimating that 8 million people in the UK and 1 million people in London are living in ‘food poverty.’ As part of the Centre, Professor Martin Caraher highlighted in a paper to an All Parliamentary Groups on Food Poverty that surplus food given to food banks is not a way to address hunger or a person’s rights to nutritional food. Professor Hawkes regularly engages with the UK Department of Health and Social Care on the national obesity policy as part of her work as Co-Investigator of the Obesity Policy Research Unit.
IMPACT 8: Blood oxygenation of critically ill neonates

City, University of London in partnership with Great Ormond Street Hospital for Children has created innovative wearable optical sensing solutions for the non-invasive and continuous monitoring of blood oxygenation of critically ill neonates.
INSTITUTE OF CANCER RESEARCH

IMPACT 9: The London Cancer Hub

The Institute of Cancer Research, London, is working with the London Borough of Sutton on pioneering plans to develop The London Cancer Hub – a global centre for cancer innovation which will deliver huge benefits for cancer patients, the local community and the wider London and UK economy. The London Cancer Hub will bring together academic researchers, clinicians, technology transfer specialists and innovative companies to create a vibrant collaborative ecosystem on a 21-hectare site in south London. We aim for it to be the world’s leading life-science district focused on cancer research, treatment, education and enterprise.

The London Cancer Hub is a major redevelopment project that will completely reimagine the existing Sutton site. When complete, it will offer more than 280,000 square metres of life-science buildings including facilities for cancer research, diagnosis, treatment, education and commercial collaboration. The Institute of Cancer Research (ICR) is already the UK’s leading higher education institution for research quality, impact and commercialisation, and discovers more cancer drugs than any other academic organisation in the world. The London Cancer Hub will build further on these foundations by creating incubator and innovation space for small and larger life-science companies, and shared buildings that nurture interactions between academia and industry.

The London Cancer Hub will also be a world-class centre for scientific and clinical training – opening up career opportunities and the chance to work with colleagues from many different fields. The site’s educational offering includes a pioneering science-specialist school – the first in the UK to meet the Passivhaus energy performance standard for environmental sustainability. The ICR is working with local schools and community groups on an extensive programme of public engagement to engage and involve local people in the exciting science taking place across the site.

Benefits for London

The London Cancer Hub will deliver dramatic and wide-ranging benefits for the health and prosperity of the people of London:

- It will be a game changer for UK cancer research – increasing the number of drugs that the ICR and its partners can discover, develop and commercialise.
- It will increase the chances of transformative new cancer treatments reaching patients – improving health outcomes for people across London, the UK and internationally.
- Its superb environment and facilities will help attract world-class researchers from across the UK and internationally to be part of London’s thriving life-science industry.
- It will attract businesses from the whole of the UK and internationally, bringing high-value investment, skills and knowledge to London.
- It will drive economic growth locally, regionally and nationally – generating a projected £13m in business rates and £1.2bn GVA to the UK economy annually.
- It will create jobs, generate revenue for the borough and help drive broader changes that will benefit all local residents, including substantial improvements in public transport infrastructure.
- It will inspire and educate future scientists and clinicians, providing opportunities for the next generation of research leaders, and enticing young people across the local area to pursue careers in science.
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KING’S COLLEGE LONDON

IMPACT 10: Scientists at King’s are providing official air quality forecasts to the Mayor of London

King's is working in partnership with the Mayor of London, Sadiq Khan, to ensure schools and vulnerable Londoners are quickly informed of significant incidents of poor air quality in the capital.

Scientists at King’s Environmental Research Group use data from the London Air Quality Network, alongside projections from other leading forecasters, to deliver coordinated warnings and urgent alerts to the Mayor’s office. It is hoped that the alerts will encourage Londoners to make small changes that might reduce their exposure to toxic air. The Mayor of London said, ‘I introduced air quality alerts within months of becoming Mayor. The system has proved to be very successful but I am delighted to bring the expertise of King’s College London on board so that we can reach more Londoners, particularly the most vulnerable, with the very latest information.’

King’s is one of the leading providers of air quality information and research in the UK. The Environmental Research Group combines air pollution science, toxicology and epidemiology to determine the impacts of air pollution on health. This world-leading research is being used by London boroughs and local Business Improvement Districts (BIDs) to combat air pollution. Westminster City Council used King’s pioneering research to create ‘air quality backpacks’ that monitor pedestrians’ exposure to harmful pollutants on Westminster’s streets. King’s scientists have worked with several central London BIDs to create low-pollution walking and cycling routes, with one between Embankment and Covent Garden reducing pollution exposure by 47 per cent.

King’s commitment to tackling air pollution in London makes a tangible difference to the wellbeing and health of Londoners, with many of the city’s air quality improvement measures informed by the university’s pioneering research.
**IMPACT 11: Science Gallery London’s Young Leaders bring new perspectives to King’s research**

Science Gallery London on King’s Guy’s Campus – alongside Guy’s Hospital – offers new ways for academics to develop and showcase their research, for students to enrich their learning and for local and broader communities to connect with the university on their doorstep.

The gallery invites new audiences to engage with King’s research through the lens of science and arts. Its thought-provoking seasons are co-created with young people, through its Young Leaders – 15- to 25-year-olds drawn from King’s home boroughs and student body. These dynamic and creative young people – from biomedical students to textile designers – shape Science Gallery London’s approach so that its activity represents and champions their interests. Students also play a crucial role as mediators, interpreting scientific and artistic concepts to curious visitors while gaining vital communication skills. Young Leader and King’s medical student, Mandeep Singh, said, ‘Science Gallery London challenges students and young people from south London and beyond to embrace their creativity while exploring the very latest scientific thinking.’

Science Gallery London hosts three themed seasons each year. Its opening season **HOOKED: When Want Becomes Need** explored the complex world of addiction and recovery, drawing on world-leading research from the Institute of Psychiatry, Psychology & Neuroscience. Its second season **SPARE PARTS**, investigated transplantation, regeneration and prosthetics, while **DARK MATTER** questions what makes up our universe.

King’s strategic vision sets out its commitment to London. Science Gallery London is central to this ambition, opening up new ways into King’s, addressing issues that are of significance to the capital and inviting local communities, through their lived experience, to be part of the process of generating new knowledge.
IMPACT 12: King’s students are working at the heart of London’s business community

At King’s Business School, final-year undergraduate students are being paired with small-medium enterprises (SMEs) in Westminster to address live challenges that local entrepreneurs are facing. The King’s Business School Consultancy Project has been developed and organised in partnership with Westminster City Council. It delivers mutual benefits by providing local SMEs with valuable support, while giving students an opportunity to test their skills and knowledge in the world beyond the university.

At the start of the inaugural programme in 2018, students were organised into groups and each spent a month working with local enterprises, examining their specific business challenges. Each project culminated in a final presentation to the group’s business partner, detailing their analysis and recommendations. King’s undergraduate Aeman Junaid, who worked with gaming company Two Way Media, said, ‘I found the Westminster City Council programme a completely different experience to an internship. We were interacting with real clients and taking ownership over our roles. We organised our own meetings to present our ideas. It was great to work for a real company with inspiring entrepreneurs who gave us real insights into their working lives.’ Two Way Media’s chief executive, James Turner, added, ‘In a small business, it’s easy to be sucked in by the day-to-day rather than strategy. But this has helped the business to shift its attitude. The project unlocked our thinking about different approaches.’

Integrating London’s business communities into the learning experience is one of the ways in which King’s is delivering its strategic vision for the years leading up to the university’s 200th anniversary in 2029. Professor Stephen Bach, Executive Dean of King’s Business School, said, ‘Westminster Business Clinics are a distinctive way for King’s students to translate their knowledge into tangible solutions that local companies can use to grow and enhance their businesses.’
IMPACT 13: Parent Power wins Guardian social and community impact award

Ground breaking project from King’s Widening Participation team recognises the impact parents can have on their children’s success. King’s has won the Guardian’s social and community impact award for Parent Power, a pioneering project that harnesses the potential of parents to inspire young people from underrepresented groups to pursue higher education.

Developed by King’s Widening Participation department and community organising charity, Citizens UK, Parent Power recruits and trains parents from King’s local boroughs to become experts in university access and campaigners on educational equality. The Guardian’s University Awards celebrate “inspirational and ground breaking projects from UK universities”. King’s Widening Participation team first ran the programme with the parents of 50 high performing and underrepresented pupils living in King’s local boroughs of Lambeth and Southwark. It brought them together to gain knowledge about the education and university system and improve their skills and relationships to break down the barriers their children are facing.

Parent Power recognises the specific support required by pupils with academic potential who come from families with no history of university participation. Just 24 per cent of pupils eligible for free school meals go on to higher education, compared to 42 per cent of those from better-off families. Over a quarter of this gap in participation relates to students with the same levels of attainment at GCSE.

At the start of the project the parents identified three issues to focus on: the cost of academic summer schools, the difficulty of visiting universities outside London, and the cost of British citizenship applications. Following a series of successful campaigns, they have secured fully funded bespoke open days at universities across the UK and negotiated bursary places on private summer schools. The parents meet every few weeks to develop these campaigns while receiving training from a King’s staff member on topics including higher education admissions, private tutoring, finance and accessing medical courses.

Speaking about the award Anne-Marie Canning, Director of Social Mobility & Student Success at King’s, said: ‘We are thrilled that the Parent Power parents and this project are being recognised and celebrated at a national level.’ Canning, added: ‘This project harnesses the power of parents to inspire their children to see university as open to them and the work they are doing is just phenomenal. At the same time Parent Power provides a unique opportunity for King’s to really connect with, appreciate and address the concerns of local parents and carers, both in our communities and beyond.’

Project Lead: Paul Webb, Widening Participation Officer, paul.webb@kcl.ac.uk
LONDON METROPOLITAN UNIVERSITY

IMPACT 14: Refugee Assessment and Guidance Unit (RAGU)

The Refugee Assessment and Guidance Unit (RAGU) at London Metropolitan University provides specialist careers advice and guidance as well as employability training for all refugee health professionals. This programme is part of the Building Bridges Programme, an NHS-funded partnership. We work with our partners Glowing Results and the Refugee Council.

We support:
- doctors and dentists
- nurses and midwives
- pharmacists and biomedical scientists
- allied health professionals e.g. physiotherapists and radiologists

We offer the following services:
- individual appointments with a specialist careers adviser
- up-to-date information and guidance on routes to professional registration
- practical employability workshops focused on getting work in the health sector – includes CV writing, networking, job applications, interview skills, NHS familiarisation and cross-cultural communication
- work placements in the NHS
- funding for some professional exams and training
- extensive advocacy with professional bodies

Our careers programme supports clients to move forward into:
- paid work in the healthcare sector
- professional training in the healthcare sector
- professional registration
- alternative healthcare employment

Case study: A refugee Doctor - Zakia's story
After graduating from Kabul Medical University in 1985, I fled to Pakistan because of the ongoing Soviet-Afghan war. I was working in a Red Cross Hospital for nine years, first as an anaesthetist, then training in obstetrics and gynaecology. I returned briefly to Afghanistan, but was again forced to flee by the Mujahideen and came to the UK with my three young children in 1995.

Initially placed I was placed in unsuitable accommodation, until I eventually settled in West London with my young family, managing with very little support and few contacts. I had a fairly good grasp of English, however, my childcare responsibilities prevented me from attending English for Speakers of Other Languages (ESOL) classes. Eventually, I was reunited with my husband.

In 1998, I had my fourth child and suffered serious medical complications, meaning I was unable to pursue any professional development for several years. The lack of social contact resulted in my English language ability deteriorating and my goal of re-starting my medical career seemed very remote indeed.

My life changed in 2009. I joined the programme at RAGU for refugee health professionals, and after speaking with RAGU advisers, I joined the free International English language Testing System (IELTS) tutorial with Glowing Results and started volunteering for the Southwark Lay Health project. This project trained me to work in a team to give NHS health checks to the public and I had a chance to develop my English communication skills. It was tough talking to members of the public outside the
tube station but it’s always been my passion to help people. This was a good opportunity to improve my English, meet new people and do clinical work.

After volunteering for a year, I joined RAGU’s work placement programme and started to work in a GP practice as a Healthcare Assistant (HCA). At first, I felt shy and lacked confidence. However, after some weeks, I was running my own healthcare sessions and giving health checks, taking blood samples and registering new patients. I believe that all refugee healthcare professionals should engage in voluntary work. HCA’s have a range of responsibilities that doctors don’t. During my HCA work, I sat in on GP consultations and the doctor asked if I could listen to a patient’s chest. It was the first time in the UK that I had been recognised as a doctor.

In 2015 I achieved the required IELTS score and went on to study for the PLAB exams. I passed Professional and Linguistic Assessments (PLAB 1) the first time but narrowly failed my PLAB 2. My confidence slipped, but with encouragement from my son, I re-took the exam and passed. Through the Refugee Doctor’s programme at the Refugee Council, I undertook a clinical attachment at Whipps Cross Hospital, leaving home on cold winter mornings at 6am to attend the handover team meetings before work. I was placed with an experienced obstetrics and gynaecology consultant which I found very helpful. I am now registered with the GMC and about to start my first paid post as a medical doctor in the UK at Northwick Park Hospital under the CAPS scheme for refugee doctors. I would like to say a huge thank you to RAGU and for the amazing support and guidance over the years. I can honestly say that I would not have been able to reach my goals without their assistance. RAGU kindly organised my first placement as a health care assistant and that provided me with the experience which has led to my licence to practice as a doctor in the UK.
IMPACT 15: London Met’s Accelerator

Accelerator is London Met’s specialist business incubator in Shoreditch, the heart of London’s ICT and digital media community. They specialise in the incubation of, and delivery of business development programs for high value, innovative, growing businesses in information and communication technology, interactive media, e-learning and design. Accelerator offer a range of help, support, advice and events for those interested in going into business for themselves. If you’re a student of London Met or a graduate from the past five years, we can give you the opportunity to discuss your business ideas with a professionally qualified business adviser. We also offer funding and office space, as well running regular workshops and motivating talks designed to equip you with the knowledge and inspiration to take your ideas to the next level.
IMPACT 16: Big Idea Challenge

Through our annual Big Idea Challenge, we encourage our students to submit their ideas for the chance to win a share of cash and other prizes worth £30,000. We put our contestants through rigorous training that will set them on the path to achieving their business dreams. The Big Idea Challenge for University staff and students is run in parallel with a competition of the same name which supports schools and colleges across London. London Met’s widening participation team.

The team reach out to partner schools and colleges in London and work directly with teenagers to guide and support their ideas. The young budding entrepreneurs are mentored by professional partners from sponsors such as Microsoft, NatWest and The Prince’s Trust.

Innovating to help prevent date-rape
The winning team this year was from Newham Sixth Form College. They created a product called Bracelet Alert, a stylish bracelet with removable strips that can be used to test for date-rape drugs in your drink. It gives accurate results, helping to empower women to take control of their own safety. The winning team receive specialist business, marketing and PR support and a professional website design to help them turn their idea into a reality.

Helping troubled youngsters in London
This year’s overall winner, The Write Path, is a 12-week intensive course which helps troubled teenagers channel their creativity into a piece of fiction which is ultimately published in an anthology. The idea is owned by student George Kelly who said: “I am really overwhelmed to have won the Big Idea Challenge and I wasn’t expecting it. I didn’t know there was a possibility I was going to win.

“Winning the Big Idea Challenge has given my idea some credibility and it’s finally on the Write Path.”

The Write Path won the Grand Champion award and the Social Impact categories. Read about this year’s awards: https://www.londonmet.ac.uk/news/articles/2019-big-idea-challenge-winners-announced/ Watch George’s spoken work poem-pitch for the Write Path: https://www.youtube.com/watch?v=3ulEJxdOzk
London South Bank University (LSBU) has a strong history of supporting local councils with research into topical issues affecting the Capital. In June 2018, Waltham Forest Council commissioned a team of LSBU academics to produce an in-depth study looking at how the operation of street gangs has developed in the borough over a ten-year period. The report was commissioned after the Council noticed an increase in violent crime coupled with a significant transformation in the way that gangs were carrying out their activities, in contrast with a decade earlier.

The research commission came at a crucial time, given the extent of media coverage of violence on the city’s streets and the pressure being placed on London’s Mayor to find pragmatic ways to tackle the problem.

LSBU’s gangs report was impactful when it was published. Extensive high profile media coverage of the findings helped to better inform an understanding of gang activity in London, while simultaneously generating useful discussion among key decision makers in local and central government.

The authors spoke to current and former gang members and practitioners from a wide range of disciplines, to better understand the behaviour, make-up, recruitment and purpose of gangs so that the Council could build on the interventions and services already in place.

While a previous study published ten years earlier, found that gangs focused mainly on postcode territories and demonstrated their identity and gang affiliation through “colours” and other insignia, the new report demonstrates a marked shift in behaviour towards a more organised business operating model focused on the drugs market and the desire for profits.

The main findings were:

- Gangs are becoming more economically driven and are operating on ‘county lines’, using young people to courier drugs beyond London;
- Territory is no longer strongly linked to postcodes, but is a business marketplace;
- There has been an increase in the involvement of women and girls, as they have a relative “invisibility” and are less likely to be searched by Police;
- Gangs are divided about the use of social media, with some operating an “off grid” approach and using older technology, while others use it to reinforce “brand” and gang identity.

Waltham Forest Council followed up on the report by establishing the borough’s first financial investigative unit with the specific remit of investigating money-laundering, with powers to seize criminal assets.

The report informed a joint initiative between Waltham Forest Council and the Metropolitan Police to crack down on gang activity, leading to a significant 38% reduction in gang-related crime in affected areas.

The study has been extremely successful in highlighting the need to address the ever-changing nature of gang-related activity and violence in our cities. The positive outcomes seen in Waltham Forest, have the potential to influence other parts of the UK, through a ‘ripple effect’. This research is also having a wider impact because lead author, Professor Andrew Whittaker has been invited to be an adviser for the Parliamentary Office of Science and Technology’s review of gang interventions.
and to be a guest speaker on the subject, at home and abroad, in Canada and the US. He is also serving as a Commissioner on the Poverty and Inequality Commission for the Smith Institute, chaired by Baroness Tyler, in the London Borough of Enfield.

Project Lead: Dr Andrew Whittaker, Associate Professor and Head of the Serious Violence research cluster at LSBU
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IMPACT 18: Smart Energy Network

In March 2019, Green Smart Community Integrated Energy Systems (GreenSCIES) began its first trial with LSBU and partners – Transport for London and Islington Council - thanks to funding support from the Government’s modern industrial strategy and the Department for Business Energy and Innovation Strategy (BEIS).

The aim of the GreenSCIES feasibility project was to investigate the delivery of low carbon, affordable energy through a novel smart energy system that connects flexible electricity demands, such as heat pumps and electric vehicles, to intermittent renewable energy sources, such as solar power. This smart grid energy system has been designed to provide a sustainable energy supply for local business districts and domestic homes.

Sources of inner city excess heat being looked at include sewers, supermarkets, cable tunnels and data centres.

Professor Graeme Maidment, heads up this research project which LSBU is spearheading in partnership with TfL and Islington Council. With a 30-year career history spent perfecting air conditioning and refrigeration systems, researching ground source energy systems and tackling the problem of how to cool down the London Underground, Professor Maidment brings a wealth of expertise to the role. Graeme still teaches in LSBU’s School of Urban Engineering but he has also been seconded to work as a consultant on GreenSCIES, on behalf of BEIS.

With the Mayor of London’s goal of ensuring that the Capital achieves zero-carbon status by 2050, this study is a vital initiative in terms of exploring the possibilities of using waste heat to help power London’s homes and businesses, cutting energy costs and reducing carbon emissions.

Projects such as GreenSCIES demonstrate that London based higher education institutions are at the forefront of ground-breaking new research of international significance, striving to improve the lives of people not just in London, but globally.

Project Lead: Graeme Maidment, Professor of Air Conditioning and Refrigeration in the School of Engineering, London South Bank University.
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A major programme of lectures, seminars and book-related events are free and accessible to everyone, and attended by many members of the public, including school students.
IMPACT 20: Research Festival

An annual research festival, opening LSE research to a week of public access and debate.
IMPACT 21: Individuals Academic’s Involvement

Individual academics are involved in seminars, conferences and debates about London’s housing, government and planning involving City Hall, the London boroughs, the Metropolitan Police and Transport for London, including:

- Professor Christine Whitehead has taken part in a debate at New London Architecture about London housing supply and advises the House of Commons Housing, Communities and Local Government Committee about housing.
- Professor Whitehead and Dr Kath Scanlon have undertaken a comprehensive inquiry into the impact of foreign investment on the London housing market for the Greater London Authority.
- Professor Tony Travers was a member of the Tower Hamlets Brexit Commission in 2018-19. In the previous year he chaired the London Finance Commission, appointed by the Mayor of London.
- A team at the School’s Conflict and Civil Society Research Unit recently published *Understanding Brexit impacts at a local level: London Borough of Barnet case study*
- The School’s Centre for the Analysis of Social Exclusion produced a report on *Prosperity, Poverty and Inequality in London 2000/01-2010/11* for the Trust for London and other funders.
- Professor Kevin Featherstone and the European Institute have held a series of public events about Brexit, including about the impact on London economy
IMPACT 22: New Square to Houghton Street

In 2019, the LSE will add a new square to its site in Houghton Street which will be open to the public.
Middlesex University undertook research, funded by the Trust for London, to investigate how workers were being short-changed by their employers. The Unpaid Britain project was established to investigate the extent to which wages go unpaid in Britain (particularly in London), identify the mechanisms and reasons for non-payment, to propose means for reducing the frequency of non-payment and improve the likelihood of workers recovering the owed wages.

The research revealed that at least two million workers in Britain were losing over £3 billion a year in unpaid holiday pay and wages. The lead author, Nick Clark, said while workers were losing out their employers rarely faced penalties and, in any case, consequences for non-payment were so weak that they didn’t present a sufficient deterrent and many employers continued to reoffend.

The report revealed that unpaid wages in the London labour market coincided with the increase of in-work poverty in the capital. According to the latest London Poverty Profile, 58 per cent of Londoners in poverty are actually in a working household, a proportion which is described as “an all-time high.” For workers in these circumstances, even small reductions in pay can have catastrophic consequences.

Key recommendations included: improved access to advice and advocacy, stronger measures to recover unpaid sums, enforcement against non-payment of holiday pay and non-provision of payslips, tougher sanctions against recidivist directors and employment rights training for students. The report had significant impact. An interim report (published in June 2017), and the final report published in November received detailed coverage in The Guardian, as well as on local radio and print media. The ‘trade press’ in particular reported on the results, with those targeted at trade union audiences paying close attention, with Labour Research (circ. 3,150) Workplace Report (1,500) and Hazards (c. 2,000 safety representatives), all covering it in detail between 2017 and 2018.

This led to it being cited in the Environment Audit Committee’s report on Hand Car Washes. It also led to the tabling of an Early Day Motion (EDM 670, Dec 2017) calling for stronger enforcement, and signed by 73 MPs, Parliamentary Questions regarding one of the case studies (by Caroline Lucas on 20th December 2017), and citation of the report in support of Stewart McDonald’s private members’ Bill on work trials, also in December 2013 and again in a letter to Phillip Hammond on 26 October 2018.

The Lambeth Law Centre reported that they adopted as a model for their own systems the form we had produced to track relevant case work which helped them to identify characteristics of clients facing unpaid wages, as well as to monitor progress. The Centre dealt with 383 employment-related cases in the year to March 2018.

Assistance was also given to journalists looking to examine other features of labour exploitation, with the producers of the Channel 4 Dispatches investigation into room cleaners working in Premier Inns. The programme had over 2 million viewers.

https://www.mdx.ac.uk/__data/assets/pdf_file/0017/440531/Final-Unpaid-Britain-report.pdf?bustCache=35242825

Report finds British employers withholding billions from workers
Research reveals British workers denied £2.7 billion each year

Project Lead: Nick Clark, n.clark@mdx.ac.uk
IMPACT 24: Knife crime prevention

Middlesex Professor in Community Justice Anthony Goodman is applying his experience of working with offenders for over 40 years to help address current trends in youth violence and related social challenges in London.

Assisted by Criminology Lecturer Dr Damon Briggs and other Middlesex colleagues, Professor Goodman will evaluate two projects - a school knife crime prevention programme led by Southwark Youth Offending Service, and a project in a Croydon pupil referral unit to transform outcomes for marginalised young people excluded from mainstream education. The Southwark programme, which also covers schools in Lambeth, has been given £150,000 funding by the Mayor's Young Londoners fund and will run over three years.

Ongoing evaluation by Middlesex University is spelt out in the bid document. The programme will deliver anti-knife crime workshops at schools and student mentoring using a trauma-informed approach, underpinned by the Theory of Change and guided by a literature review. Once participants' trust has been earned they are encouraged to divulge how safe or unsafe they feel in their local environment. They are then assisted to identify trusted adults who can help them feel safe without carrying weapons.

The Southwark programme came out of a Home Office-funded workshop that the Youth Offending Service held at a local Pupil Exclusion Unit with small groups of students in early 2018. Professor Goodman looked at the themes that came up, then evaluated participation, the young people and their teachers. With most young people growing up in Southwark suffering from trauma of some kind, the case for intervention was "bang on", says head of Southwark Youth Offending Service Andrew Hillas. Securing funding for a follow-up project over such an extended period as three years is unusual, Hillas explains, and will help the labour-intensive process of an evidence-based intervention. "We can follow young people, get some concrete research and a year on, see if it's had any lasting impact" he says.

The Croydon project at Saffron Valley Collegiate, which teaches 180 pupils through five provisions, has also been awarded £150,000 funding over three years. The project involves commissioning a dedicated Family Co-ordinator and specialist tutors, and training students to become peer educators, with the aim of facilitating students' return to mainstream education through improved mental health and decreased criminal activity such as knife-carrying. Professor Goodman and his colleagues will research the impact of SVC's work and at the end of the three years come up with a best practice model to ensure the delivery of progressive, impactful and cost-effective Personal, Social, Health and Economic (PSHE) education.

135 people were stabbed in London last year, the highest figure in almost a decade. 18 of the victims were children and teenagers. Excluded pupils – disproportionately from certain ethnic minority groups, pupils eligible for free school meals and pupils with special educational needs – are twice as likely to carry a knife as other students, with vigorous debate over the nature of the links between exclusion and knife crime.

Knife crime is “one of the most pressing and depressing problems currently in youth justice”, Professor Goodman says. He has encouraged colleagues with different specialisms to join him in evaluating the two projects, anticipating they will produce useful publications and a lasting impact on youth policy off the back of their involvement.

Project lead: Professor Anthony Goodman, a.goodman@mdx.ac.uk
Researchers in the humanities and social sciences at Queen Mary University of London are directly translating research into cultural and social impact with London’s museums and on the London visitor population.

The Centre for Studies of Home (CSH) is supporting the Geffrye Museum of the Home (GM) programming including a new Home Gallery, part of an £18M National Lottery Heritage Fund supported development, which is anticipated to attract c.170,000 visitors per year from 2020. The Centre is a research partnership between Queen Mary and the Geffrye Museum of the Home. This support involves the co-production of museum content, extending people’s understandings of home and domestic life. The CSH has also been involved in five co-curated exhibitions at the museum between 2016 and 2019 on servants in London’s households, on teenage bedrooms, on housing estates as home, on past inhabitants of houses, and on stories of living in London, and enables the development of learning resources for children and adults. In addition, the CSH is strengthening the museum’s engagement with London and local residents by: supporting a successful Arts Council England application from the museum to fund work to develop engagement with local Bangladeshi, Black African, Turkish and Vietnamese communities; helping to build lasting contacts within the local Vietnamese community through research on home, migration and the city for Vietnamese people in East London; and creating a programme of public engagement about home and the city, including short films and an audio walk.

The Centre for Childhood Cultures (CCC) involves a partnership with the V&A Museum of Childhood which is having a tangible impact on the lives of those living and working in London, as well as visitors to our capital. The CCC enabled the creation of the V&A Museum’s Children’s Forum, which has provided children in Tower Hamlets with insights into the life of the museum and opportunities to feed into its organisation and operation. The Children’s Forum is at the heart of the Museum’s ongoing reconceptualization and is transforming the museum visiting experience and creative opportunities for children locally, nationally, and internationally. The Centre has also substantially enriched programming for both the V&A Museum of Childhood and a broad range of London cultural and heritage organisations, attracting new audiences through a variety of research-informed exhibits and events. ‘The Alice Look’ exhibition at the V&A Museum of Childhood, the first of its kind to consider Lewis Carroll’s heroine in relation to fashion and dress curated by the CCC co-director, was viewed by 218,000 people, 1 in 5 of whom came to the Museum solely to see the exhibition. Other research has led to the production of award-winning films on children and migration, exploring themes of welcome and hospitality, which have been screened and discussed in venues across the capital including the Ragged School Museum, the Photographers Gallery, Hackney Museum, V&A, to name but a few.

Project lead: Professor Alison Blunt, Professor of Geography, Email: a.blunt@qmul.ac.uk
IMPACT 26: Work on Atrial Fibrillation in East London

Ground breaking work led by the Clinical Effectiveness Group at Queen Mary, which brings together three East London Clinical Commissioning Groups, has prompted considerable improvements in routine population health clinical outcomes through the adoption of a Learning Health System. Through the development of a single platform, which optimizes a diverse economy of IT systems, this Group has ensured the three CCGs have performed exceptionally well against a wide variety of metrics for Quality Improvement, putting City and Hackney, and Tower Hamlets, in first or second position in 18 out of 65 clinical indicators.

As a result of optimizing these patient data platforms, the three CCGs have been able to trial interventions into early detection of atrial fibrillation (AF), a key and modifiable risk factor for stroke. Research published in 2018 demonstrated that opportunistic pulse regularity checks in patients over the age of 65 had equipped GPs with the requisite data to detect AF much earlier, and therefore intervening much earlier in introducing stroke prevention measures. Trial data showed that where regular pulse testing was taking place, age-standardised prevalence of AF in patients aged above 65 increased significantly from 61.4/1000 (prior to introduction of the intervention) to a mean of 64.5, with 790 additional new cases identified as a result of the new testing regime and referred for anti-coagulation. This platform has had similar success in the treatment of cholesterol and diabetes in Tower Hamlets. Between 2015 and 2016, there has been a 28% increase in the number of patients over the age of 75 receiving cardiovascular disease or diabetes high intensity statins, with an 18% reduction in the number of patients on NSAIDs for cardiovascular disease. Non-drug related clinical interventions in Type 2 diabetes have also led to an 11% reduction in the number of LAA insulin prescriptions in twelve months, whilst antibiotic prescribing has reduced by 45% in the borough, thereby contributing to the national campaign against AMR.

Project Lead: Dr John Robson, Clinical Reader in Primary Care Research and Development, j.robson@qmul.ac.uk
The PhD in Media and Arts Technology (MAT), QMUL is an innovative four-year full time programme, unique in the UK. It is built around core courses in advanced research methods, interaction design and digital media processing, production and recording techniques and optional specialist modules ranging from Digital Audio Effects through Digital Rights Management to Contemporary Performance. Our mission is to produce post-graduates who combine world-class technical and creative skills and who have a unique vision of how digital technology transforms creative possibilities and social economies.

MAT students have set up their own companies and secured seed funding and investment e.g. Lyske span out HeresyAI, now called MXX based in London which has attracted nearly £1.8m in investment, and currently has eleven employees in London and five overseas contributing to both London and UK Creative Economies. MXX has one paid license agreement already in use, and is in the process of signing a license agreement with Epidemic Sound, a music catalogue for the YouTube creator market; who currently has 400,000 users and will add MXX to their offering. This project will go live within the next few weeks. MXX has also been approached by two of the big three music labels to license their products.

MAT students have made societal impact through their research, for example, Heitlinger, worked with urban farmers through Spitalfields City Farm in inner East London to involve citizens in the design of sustainable smart cities, particularly in the context of marginalised and culturally diverse urban communities.

MAT students regularly exhibit their work in public exhibitions and festivals bringing their research to the general public and raising awareness of their research topics in society in general. In London, these exhibitions have included Victoria and Albert Museum, Rich Mix, Digital Shoreditch, Excel Wearable Technology Exhibition, The Barbican (London), Tranform Trauma (St. Barts, London), Somerset House (London), Watermans (London), Royal Festival Hall (London), Tate Modern (London), GV Art Gallery (London).

The MAT has strong links with Digital Economy industries, especially in Tech City (East London digital creative sector where many MAT students undertake their 5 month industry placement projects), as reflected in membership of our Advisory Board which includes Chris Moore from UK Department for International Trade, and key supporter of Tech City initiative. MAT students have also been a strong presence at TeenTech ("founded in 2008 by Maggie Philbin and Chris Dodson to help the “X Factor” generation understand their true potential and the real opportunities available in the contemporary STEM workplace") which we have supported strongly through student involvement.

This course is managed by the School of Electronic Engineering and Computer Science: mat-enquiries@qmul.ac.uk
What really caught my attention was the research that evidenced how people’s sense of place and of community improved their wellbeing. The projects run by the [Royal] Central School of Speech and Drama demonstrated how, through the use of the arts, people can begin to change the way they see their environment and the people around them. What was even more impressive was that the improvements were replicated in individuals within small settings as well as larger communities.

User Engagement Officer at Parliamentary Digital Service: https://www.linkedin.com/pulse/do-arts-have-place-business-world-hannah-ufland

Since 2010, Performing Places has received multiple AHRC research awards (approx. £250,000) to explore and demonstrate how ‘performing place’ improves wellbeing, eases tensions in communities and provokes people to consider their local places more positively.

The work engages residents through, broadly, performance-based activities within their locality and has been used around the UK (Oldham, Aberystwyth, Abergavenny, London).

In London, Performing Places has included:
- a theatre company in Limehouse (2012-2013)
- adults with mental illness in Camden (2016-17)

1. In the first project we worked with Half Moon Theatre Company’s ‘senior’ youth group exploring fear of, and boredom with, places and how to reframe young people’s views on these places in and around Limehouse and Tower Hamlets. Approximately 25 young people participated. This work was part of a three-year AHRC-funded research project: Challenging Concepts of ‘Liquid’ Place through Performing Practices in Community Contexts (2011-2014 overall).

See www.challengingplacehalfmoon.org
Also www.performingplaces.org - sections referencing ‘Half Moon’ in ‘Place Practices’ particularly.

2. Two projects in Oldham and Camden comprised ‘Performing Places: working with local councils to reach new communities and facilitate wellbeing in living environments’ (2016-17). One was undertaken with 5 - 12 adults with mental illness living in 24/7 supported housing, run by St Mungo’s for Camden Council. Funded by the AHRC, there is a full evaluation report of this project in www.performingplaces.org/local.

“[I]t had a positive impact on me and it gave me hope. Before, I didn’t have any hope. I was depressed a lot of the time and I was anxious with people, with myself, especially myself, and I put that anger completely in the back of my mind. As the days go by, I became wiser. I feel wiser.”
(Client, Evaluation report)

3. Performing Places Bexley, 2017-19, is engaging thousands in and around the community of Bexleyheath. Commissioned by the London Borough of Bexley the project seeks to ease community tensions in Bexleyheath. Including around 40 workshops in community groups and schools to nine days of street participatory performance, the project is an ambitious engagement with the Performing Places model on a community-scale. A full evaluation will be forthcoming.

See: https://www.cssd.ac.uk/performing-places-bexley
Performing Places in London has demonstrated that people’s relationship to their local places can be changed for the better through engaging with performance-related activities. Designed to invoke a re-viewing and re-thinking of locality, these activities have shifted participants’ relationship with their places.

Project Lead: Professor Sally Mackey, s.mackey@cssd.ac.uk
ROYAL COLLEGE OF ART

IMPACT 29: ROLI Music Technology

**ROLI** is a music technology (hardware and software) company spun out of the Royal College of Art in 2009. It began as a student project on the MA Design Products programme when its founder, Roland Lamb, reimagined the piano as a wholly new keyboard that was soft to touch and gave musicians more expressive means to experiment.

Lamb took an unusual route to studying at the RCA, with a degree in Classical Chinese and Sanskrit Philosophy from Harvard University. A lifelong passion for playing the piano motivated Lamb to create a more responsive keyboard that would allow for a similar range of sounds offered by other instruments. Despite an initial lack of knowledge in sensor engineering and material science, Lamb used his time at the RCA to experiment, taking apart pianos and keyboards to gain practical understanding he needed to realise his idea.

Roland’s experiments resulted in developing the Seaboard, a radically new musical instrument based on the design of a piano keyboard. Its patent-protected technology combines a traditional approach to making music with cutting edge digital technology making it intuitively tactile and producing more expressive sounds with unusual effects.

Lamb rapidly grew his team to advance development in parallel with studying for a doctorate in design. In 2014 he launched the Seaboard GRAND while securing a series A investment of £ 7.6m.

In 2016, the company raised a further £20m in its series B funding round led by the Foundry Group and launched a touch-controlled modular synthesiser, Blocks that enabled users to create music through intuitive presses, glides and taps. Endorsing a new product, singer, songwriter and producer Grimes commented, “Roli Blocks will democratise music production. It’s so intuitive and versatile. I’m always on the go, and Blocks is the most powerful mobile production tool I’ve ever used.”

The company is based on Dalston, East London with offices in New York and Los Angeles selling products in over 200 stores in more than 40 countries. Today ROLI employs more than 100 employees.

In recent years, ROLI took a number of prestigious awards including the 'Design of the Year' award from the Design Museum of London (2014), the Swarovski Emerging Talent Medal presented at the Celebration of Design Awards at the London Design Festival (2014), "Best of Innovation" award from the Consumer Technology Association and ‘2015 Product of the Year’ by FutureMusic. In 2016, the Seaboard GRAND appeared in the Oscar-winning film "La La Land”.

Founder: Roland Lamb
Contact details: Dr Nadia Danhash, Director, InnovationRCA, nadia.danhash@rca.ac.uk
The Citizen Nature Watch project has a goal to encourage people of all ages to engage with nature. The project is a collaboration between the Royal College of Art and Goldsmiths, University of London.

The work is led by Dr Robert Phillips from the RCA’s Design Products Programme. The work builds on the RCA’s research in maker culture, makerspaces and citizen science. Dr Rob Phillips previously created the Bee Lab which combined technology with open design to enhance the practice of beekeeping. He made it easier for beekeepers to care for their own bees while also pooling their data on a nationwide basis: personal benefit combined with collective good.

The Citizen Nature Watch research is addressing two topical challenges together – public engagement with environmental science and wildlife, and public involvement in digital making. The project technology is designed to empower citizens to build an accessible technology and engage with their local nature.

The work has changed citizens’ behaviour and attitudes towards natural surroundings, sustainability of future species, as well as technology. The series of devices, including a build-it-yourself camera trap and RFID reading “bird freeder”, are inexpensive and easy to understand, make and modify tools designed for a wide range of users. The devices allow experts, community groups and the wider public to capture information about wildlife in ways that are engaging and relevant to scientific and social concerns.

The project has created a wide public resonance reaching diverse communities, schools, neighbourhoods and professional practitioners. The project outputs have been featured on BBC Springwatch with over 5 million viewers, presented at events at London’s Design Museum, V&A, and Natural History Museum. The Project website MyNaturewatch continues attracting more users making the outputs repeatable and scalable both nationally and internationally.

Principal Investigator: Dr Robert Phillips, robert.phillips@rca.ac.uk
ROYAL HOLLOWAY, UNIVERSITY OF LONDON

IMPACT 31: Holocaust Galleries at the Imperial War Museum

Royal Holloway’s Holocaust Research Institute is contributing to the design and content of the new Holocaust Galleries at the Imperial War Museum. Professor Dan Stone, a world-leading expert on the history and interpretation of the Holocaust, chairs the academic advisory board, and brings his knowledge to this important new museum interpretation. The first Holocaust Exhibition opened in 2000 and the IWM reckons on twenty years as the life of its permanent exhibitions. With the scholarship on the subject now huge, with access to vast oral history collections and a massive array of representations of the Holocaust in film, art and popular culture, the time is right for the current exhibition, impressive though it remains, to be renewed. The IWM’s aim is to build on the successful elements of the current exhibition but to add to them by bringing in areas that have been neglected or overlooked, such as Britain’s relationship with the Holocaust. In general, however, the new galleries are intellectually and physically distinct from the old exhibition, and mark a new approach. For example, the aesthetic of the new galleries is totally different, with the exhibitions being bathed in light - in contrast to most Holocaust exhibitions, which are sombre - in order to emphasise that these were events which took place in full daylight, with the world watching. Similarly, the museum intends to make the galleries intersect physically and thematically with the revised World War II galleries, so as to explain to visitors how the killing of the Jews was influenced by the military situation. Most significant, with this new approach the new galleries seek to bridge the gap between popular and scholarly understandings of the Holocaust.

The academic advisory board plays a crucial role in this process. Although decisions over design are ultimately the Museum’s, the board has played and continues to play an important role in shaping content, from large-scale themes to the choice of objects to the precise wording of panels and captions. Bearing in mind the IWM’s slogan that ‘an exhibition is not a book on a wall’, the academics aim to provide breadth, depth and accuracy without confusing visitors with too much information or bombarding them with details of scholarly debates. The board itself is comprised of seven distinguished historians of the Holocaust and is attended by key members of the IWM’s team who are working on the Holocaust galleries, in particular James Bulgin, who is the Content Leader for the revised exhibition. It is a high-powered and influential group which is shaping the revised Holocaust galleries for at least the next twenty years, and it is a group very mindful of the political and social pressures that are influencing Holocaust memory in London, the UK and beyond.

This complex and troubled history of the Holocaust and its aftermath requires careful understanding of different perspectives, and Prof. Stone’s role is to ensure that board members’ views are fairly represented. With James Bulgin, he has also recommended reading, checked documents and discussed relevant issues of scholarship and museum practice. The IWM have expressed their gratitude to Prof. Stone for his work with the board, thanking him for his ‘critical contribution to the formation of the narrative that forms the basis of the project to create new galleries’ and for his ‘commitment to reconciling scholarly expertise and public history, to ensure the most meaningful learning outcome for those who attend.’ Work is ongoing to complete the galleries for a 2021 opening.

Project Lead: Professor Dan Stone
Research on plastic pollution in the Thames by Royal Holloway University of London (RHUL) in collaboration with the Natural History Museum (NHM) has revealed a shocking quantity of plastic rubbish. Contamination by toxic metals in the Thames Estuary reduced during the latter part of 20th century giving the impression of a cleaner river, but pollution by plastic is apparently increasing. Prof. Dave Morritt (RHUL) and Dr Paul Clark (NHM) are working with a team of Undergraduate, Masters and PhD students to highlight the extent of the problem.

Professor Morritt and Dr Clark, together with Thames21 and Ecotales, collaborated on a plastic awareness weekend (January 2014) at the NHM with the aim of explaining to the public the scale of the issue. In recent years, Professor Morritt and Dr Clark have carried out a range of research projects focussing on the Thames environment and how plastics potentially impact on the river and its wildlife. These include studies on the sub-surface movement of plastic rubbish, measures of microplastics in the water column, and the accumulation of floating debris, namely single use plastic drinks bottles. This bottle project developed a methodology currently being used by the #OneLess project (Zoological Society of London). Evidence from an Undergraduate research project showed that Thames fish are ingesting plastics and subsequent work that this may be moving up the food chain. The much quoted statistic “7/10 fish in the Thames have plastics in their guts” has been used to launch the Cleaner Thames campaign (Port of London Authority, PLA, September 2015), to launch Hubbub’s For Fishes Sake campaign, in a London Assembly Environment Committee Report on bottled water (April 2017) and several Thames 21 statements. A current Masters project is recording sinking debris such as wet wipes and sanitary products found at certain sites on the Thames foreshore (with Thames21). Professor Morritt was invited to speak to an APPG on marine litter (June 2016). Professor Morritt and Dr Clark are regular contributors to the Thames Litter Forum (chaired by the PLA) and, with other partners, contributed to the development of A Litter Strategy for the Thames (launched June 2018). Within this strategy we are focussed on “Establishing a ‘baseline’ picture of the current situation regarding Thames litter” although we also have interests in combating litter pathways and changing behaviours through education and outreach.

This research aims to provide evidence for why we should be concerned and make suggestions for how we can all, whether as individuals, large organisations or local government, make simple, achievable changes to our behaviour which can make a difference. Tackling the “source” rather than the “sink” is far more effective.

Project Leads: Professor David Morritt and Dr Paul Clark
IMPACT 33: Breaking barriers to Elite Professions in the City of London

Elite professional service firms in London, in sectors such as law, accountancy, investment banking and consultancy, are highly exclusive on the basis of social background. Research undertaken at Royal Holloway aims at understanding the barriers to entry to the elite professions and the impact of social background on subsequent career progression.

Over the past thirty years it has become more difficult to access the elite professions for people from less privileged socio-economic backgrounds. Typically, over 40% of new entrants to leading law firms were educated at fee-paying schools compared to c.7% of the population as a whole. In some areas of investment banks up to 60% of current leaders were educated at fee-paying schools and across the financial services sector as whole one study found that over 30% of new entrants were educated privately.

To some extent, this is counter-intuitive, as over the past thirty years we have seen the expansion and democratisation of higher education, and the formalisation of recruitment and selection techniques, both of which should ensure that opportunity is available on the basis of objective merit. A lack of social diversity within elite professional service firms has a negative impact on our economy as it reduces the talent pool available to organisations. This contributes to a potential skills gap and may reduce productivity and performance. Exclusion from the elite professions reflects wider social inequalities and is related to low rates of upward social mobility, an important policy agenda for current and previous administrations.

Royal Holloway’s research is conducted by Dr Ashley with colleagues inside and outside the academy, and has sought to understand how and why exclusion persists, and what can be done. Outputs include two reports for the government’s Social Mobility Commission (SMC), consultancy for leading firms and publications in leading academic journals. Key recommendations have included that firms should firstly amend attraction strategies to encourage higher numbers of applications from students with a wider range of educational and socio-economic backgrounds; secondly, ensure that these students have access to similar levels of support enjoyed by their more traditional peers, in order to navigate the selection process effectively; and thirdly, reassess current definitions of talent, including how potential is identified, to ensure that disadvantaged students are not ruled out for reasons of background rather than aptitude and skill. Today, elite firms are increasingly collecting detailed quantitative data in order to understand the problem and to act as a benchmark against which to assess future progress. In addition, firms have introduced techniques such as no longer screening on A-level grades; trialing CV-blind procedures; and widening the universities from which leading firms select.

This research has contributed towards changes in recruitment and selection practices by leading graduate employers. It has a positive impact on individuals (from less advantaged backgrounds seeking to enter the professions), economy (improving access to talent) and society (improving equality of opportunity).

Project Lead: Dr Louise Ashley
IMPACT 34: Socially-oriented approaches to mental health recovery for African and Caribbean men

There is well-documented evidence about the disparities in mental health for racialised minorities. People from these communities continue to have poorer experiences of mental health services and achieve poorer mental health outcomes. This disparity is most significant for African and Caribbean men. These men can become stuck in a stalled cycle of recovery if the services and support they receive are not tailored to their unique needs as both individuals of African and Caribbean heritage and as men.

Royal Holloway’s research, led by Professor Frank Keating, sought to examine what social recovery means for African and Caribbean men and what helps support such recovery. The study was conducted in three sites in London, and participants were recruited with the support of local community organisations. Interviews were conducted with African or Caribbean men, their supporters/carers and service providers. The research team also held events in which service user participants were invited to reflect on the emerging findings.

Key Findings and recommendations are:

health services

- Social recovery for African and Caribbean men is intimately linked to the re-negotiations of what it means to be an African or Caribbean man. The positive re-negotiation of personal and collective identities requires safe spaces (and cannot be achieved in isolation and/or in hierarchical and depersonalised contexts).

- Safe spaces are required to support African and Caribbean men’s social recovery. Safe spaces are needed before men can develop relationships of equality, authenticity and trust. Within these relationships men can heal the injuries associated with racism and exclusion that significantly contribute to poor mental health.

- Safe spaces should provide opportunities for engaging in a range of meaningful activities. Safe spaces could be organised around, for example, men’s groups.

- Continuity of support is required, and safe spaces should be available to men on a long-term basis throughout their journey towards recovery, including in the immediate period after being discharged from mental health services.

- African and Caribbean men should be able to define recovery in their own terms as part of a much more inclusive dialogue rather than being obliged to comply with a particular template for recovery.

- Mental health services need to consider how they can move towards the co-production of services with African and Caribbean men. Co-production should highlight the value of expertise by experience associated with the particular life trajectories of African and Caribbean men.

- The points above need to be in place to enable African and Caribbean men to (re-)gain a sense of agency, which is a central component of social recovery.

- Wider education should be aimed at understanding how mental distress requires a focus on broader societal issues and not solely on individual deficiencies. African and Caribbean men could, for example, be encouraged to share their journeys of social recovery and identity re-negotiation with others, including to children in schools.
The findings of this study have significant implications for Social and Health Care services given the over-representation of African and Caribbean men in mental health services. They make an important contribution to how we understood recovery from a social perspective and how this can be achieved at the intersections of ethnicity and masculinity in a racialised society.

Project Lead: Professor Frank Keating
In 2000 the Royal Veterinary College (RVC) established London’s first specialist incubator/innovation centre for the life sciences on its Camden Campus. LBIC was started with the assistance of development grants awarded by the London Development Agency (LDA). Today LBIC is highly regarded as a success in the life sciences sector. Since inception LBIC has built up a brand associated with high quality that meets the commercial needs of innovative technology driven companies. To date LBIC has supported over 200 companies ranging from entrepreneurial start-ups and university spin-outs to major corporates and institutions such as MSD and CRUK - a significant number originating from overseas using LBIC as a springboard to UK and European markets.

The companies working within LBIC employ approximately 130 people in high value research related roles. Many companies have graduated from LBIC to larger premises within London, providing significant employment and investment opportunities within the capital.

LBIC has a major impact on the London life sciences sector by accelerating the innovation and growth capacity of its client companies and reducing the risk to innovation performance. LBIC’s facilities and services are designed to encourage innovation in biomedical and bio-veterinary research.

Clients recognise the added value LBIC brings to their business:

Location and facilities
- Prestigious London address with enhanced marketing profile via LBIC publications and website
- Flexible terms for equipped laboratories, office space, hot desks, technical and professional support
- Strategic location at the heart of London’s life science cluster with easy transport links to UK and mainland Europe

Technical expertise
- Driving collaboration with London’s world-class universities, teaching hospitals, clinical trial centres and biomedical research centres such as the Francis Crick Institute
- Supported access to RVC’s unique research facilities and biological sciences experts to support and validate their innovations
- Opportunities to engage with the RVC’s and other institutions’ students for education, project work and recruitment.

Networks supporting innovation and growth
- Access to an established LBIC community of life science companies and partnering opportunities
- Introductions to the region’s professional and networking organisations including One Nucleus and OBN
- Access to LBIC’s private sector Business Support Network, offering a range of services at preferential rates to drive growth and avoid the risks associated with setting up in challenging markets
- Access to seminars and major networking events hosted by LBIC e.g. BioWednesday which attract approx. 150 industry delegates
• Working with local partners to improve outreach to schools and colleges, driving employment within the sector.

**Brokering Access to Research Infrastructure and Expertise**

The RVC is a world renowned research-intensive specialist institution that undertakes basic biological and biomedical research, and applied veterinary pre-clinical and clinical research. LBIC is fully integrated into the College’s KE Strategy and the wider mission of the RVC, which is to provide innovation and leadership in veterinary science and medicine, and pioneering clinical activity in support of the global ‘One Health’ agenda with the aim of improving the health and welfare of all species.

Dr Ken Larkin CEO

[www.lbic.com](http://www.lbic.com)

[lbic@rvc.ac.uk](mailto:lbic@rvc.ac.uk)
The Inside Science programme began in 2014 when St George’s researchers began visiting HM Prison Wandsworth, one of the largest prisons in Western Europe. Inside Science sessions are delivered every six weeks by a member of University staff, often accompanied by a staff colleague or a university student. Each session lasts for 90 minutes, and involves talks on a variety of scientific topics at the same time as an art class is taking place. The session content is chosen to be open and engaging, often created in collaboration with the participants and frequently linking to topical debates and media reports. Over 70 topics have been addressed, in areas of health and medicine, the natural world, mathematics and art in nature. Recent presentations have addressed the human microbiome, general relativity and the medical use of cannabis in epilepsy.

Inside Science has a wider impact on society. It supports some of the most marginalised and underserved people in society in a number of ways. Those who may have had little or no opportunity to explore science, health and medicine are empowered to do so, but without the boundaries of a traditional prison education programme. The approach is inclusive and encouraging to those who may find formal learning difficult, with the emphasis on listening and responding to the participants rather than ‘delivering’ teaching.

The impact of Inside Science is experienced at both the University and the prison and the priority afforded to Inside Science is a demonstrable commitment to outreach and engagement work. Everyone in the UK has an interest in the experience of those who are in custody. Crime, punishment and rehabilitation are increasing challenges for society with contested ideas about how to deliver effective provision that serves the interests of those within and without the criminal justice system. Inside Science draws on the evidence to provide a programme with a reach and impact that extends well beyond those who attend the sessions.

Project Lead: Professor Julian Ma, Director of the Institute of Infection and Immunity, jma@sgul.ac.uk
IMPACT 37: Primary Practice: giving children their first experiences in medical education

Each year since 2007, the Widening Participation team at St George’s has run the Primary Practice project, an after-school club offering primary school students in Year 5 and Year 6 the chance to learn more about medicine and healthcare.

Between 10 and 12 local primary schools take part in the project each year, which is run by St George’s student ambassadors at each school. Over five weeks the school students experience problem-based learning through the story of a boy called Sam, who falls and injures his arm. Each week the students hear more of Sam’s story, and take part in a number of relevant activities, such as learning basic first aid and sign language, using bandages and slings, diagnosing injuries through x-rays and learning about surgical handwashing.

On the sixth week of the programme the students are invited to St George’s University to gain a taster of clinical skills in our mock hospital wards, where they also ‘graduate’ from the project. Participating students go on stage to say a few words about their experience of Primary Practice and receive certificates in front of their families.

Primary Practice is targeted at students from backgrounds under-represented in higher education, and is designed to support science learning, particularly about the human body, and raise awareness of the range of careers in medicine and healthcare. The project also aims to improve soft skills such as team working and communication skills and provide the students with positive role models in the form of the student ambassadors.

At one of the 2019 Graduation ceremonies, Andrew Knox, deputy head from Merton Abbey School described the initiative as: “Brilliant for widening aspirations of the students, and has been the first time students have started thinking about what they would like to do when they’ve finished school. The best part about the initiative is the relationships our students form with their mentors, they have lots of fun together and aspire to be just like the students. It’s been amazing listening to how many of our pupils are now considering a career in medicine, which is something they may not have considered otherwise.”

During one of the 2019 Graduation ceremonies one participant shared her touching story of being able to apply the British Sign Language skills that she learned during the project.

“My favourite part of Primary Practice was when we were taught sign language, because when I got home I gave my dad the sign language worksheet and was able to help him communicate with his deaf colleague with sign language for the first time.”

The programme involves close collaboration between St George’s and the partner schools in Merton and Wandsworth, many of whom have taken part in the project for a number of years. Students participating in the project are invited back to St George’s when in Year 7&8 to take part in a ‘Spring School’.

Project Lead: Jess Bond, Head of Widening Participation, jbond@sgul.ac.uk
IMPACT 38: “Test n Treat”: Exploring whether providing rapid on site tests and same day treatment could help to reduce rates of chlamydia among further education students

Researchers at St George’s, University of London, in collaboration with King’s College, London, conducted a feasibility sexual health trial involving students attending six South London further education colleges.

University researchers succeeded in recruiting over five hundred students in three weeks to take part in the trial which utilised ‘Test n Treat’ technology (TnT). TnT allows for rapid on site testing and same-day treatment of sexually transmitted infections. In this study researchers were looking into TnT as a feasible method to reduce rates of chlamydia in sexually active further education college students.

Chlamydia is a common, often asymptomatic bacterial sexually transmitted infection which can lead to pelvic inflammatory disease and infertility. However, uptake of sexual health screening by 16-24 year olds in England is too low to reduce infection rates and there are often delays in treatment. Although young people attending focus groups said they wanted easier access to sexual health screening, only 10-13% of students in three of the South London based colleges responded to messages inviting them for on-site chlamydia testing and treatment. But in those who were tested, high rates of chlamydia were found with one in twenty testing positive. Interviews conducted by researchers suggested this low uptake was associated with a lack of awareness about sexually transmitted infections, as well as students not feeling they were at risk, or being embarrassed about testing.

While the uptake of testing by students in these colleges was disappointing, the TnT trial has successfully increased awareness of sexually transmitted infections in over 500 hundred sexually active students. It has also highlighted the urgent need for improved sex education in schools, lending support to government policy to finally make relationships and sex education compulsory in secondary schools in 2020.

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Project Lead: Professor Pippa Oakeshott, Professor in General Practice, oakeshot@sgul.ac.uk
https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(18)30724-9/fulltext
TRINITY LABAN CONSERVATOIRE OF MUSIC & DANCE


Trinity Laban, the UK’s only music and dance conservatoire, works with over 37,000 people a year outside of its FTE HE training programmes, either through formal engagement in a learning and participation project or attendance at one of over 400 annual performances or events. The aim is to engage young people and adults alike in the benefits and enjoyment of lifelong music and dance practice.

The Inspired Not Tired programme is a series of groups running since 2012 for older people aged 60 and above in the London Borough of Lewisham. Supported by Lewisham Council, the programme encompasses music and dance groups that meet on site in Trinity Laban’s world-leading buildings as well as within community spaces across the borough and beyond. A mix of regular and one-off projects ensure various access points, and in the past performances have happened at the Tate Modern, Lewisham People’s Day, Royal Museums Greenwich, at care homes and at local schools.

Projects
Current Inspired Not Tired projects include:

Boundless
A creative dance group that meets once a week at the Laban Building in Deptford. Taught by a Trinity Laban dance practitioner, the class combines gentle contemporary dance technique with creative dance to improve strength and flexibility, and a chance for participants to work with others to create movement.

Voices in Motion
Meeting once a week at The Green Man in Bellingham, this group led by dance artists and musicians from Trinity Laban focusses on creatively combining movement and vocals.

The Befrienders
Led by a professional musician from Trinity Laban, and delivered in partnership with Ageing Well Lewisham, this is a social befriending group based at The Grove Centre in Sydenham. The group combines singing with other artforms, and the group regularly performs in public, with previous performance venues including Trinity Laban, The Albany and the Horniman Museum and Gardens.

Young At Heart
The Young at Heart club is a weekly social group for older people, meeting in Bellingham Green. A creative practitioner from Trinity Laban works with the group regularly, leading singing, music making in combination with other art forms.

In Autumn 2019, Trinity Laban worked with partners across Lewisham to produce the Finale event to Age Against the Machine: A Festival of Creative Ageing. Awarded £216k of the Mayor of London’s Impact Award funding, the festival was a three-week arts festival comprising over 70 events.

Partners
In addition to close working with Lewisham Council, Trinity Laban works with partners across Lewisham to deliver the Inspired Not Tired programme and is also a central part of OPAN, the Older People’s Arts Network. OPAN is a network of older people’s arts providers within the London Borough of Lewisham which includes Age Exchange, Community Connections, Entelechy Arts, SLaM,
The Albany and Trinity Laban. OPAN member organisations work together to help find ways to share information about local opportunities for older people to experience and take part in arts and culture.

**Impact**

In the academic year 2018/19 Trinity Laban worked with 722 older people from Lewisham across our *Inspired Not Tired* programme, a figure that is growing annually as the programme expands to accommodate the demand.

Feedback from groups is enormously positive:

‘Classes at Trinity Laban are; Exhilarating, exciting and friendly’
‘During class I find I become absorbed and free moving’
‘There are insights to be gained about oneself in the classes at Trinity Laban’
‘The sessions are encouraging for all levels of ability’
‘Wonderful atmosphere and company!’
‘I’ve developed a feeling of creativity and purpose’
‘It’s the highlight of my week!’

Project Lead: Kate Atkinson, Head of Community and Professional Development

Contact: k.atkinson@trinitylaban.ac.uk and t.gillett@trinitylaban.ac.uk

More information: [https://www.trinitylaban.ac.uk/take-part/for-adults/inspired-not-tired](https://www.trinitylaban.ac.uk/take-part/for-adults/inspired-not-tired)
A key strand of the work of the UCL Centre for Access to Justice is to develop integrated health and legal services, in order to tackle what Professor Dame Hazel Genn, director of the UCL Centre for Access to Justice, calls “health-harming legal needs”. These are everyday but serious problems which damage people’s mental and physical health and can be resolved by legal advice or representation rather than a medical prescription.

They are the kind of problems that no amount of medication or medical expertise alone can fix. This could be difficulties with housing, whether living in sub-standard accommodation or homelessness. Or, equally, harmful to health might be problems to do with employment – working in unsafe conditions, harassment, or unfair dismissal; domestic violence; being wrongly refused disability benefits; or a child with special needs, not getting the support they are legally entitled to at school. Social welfare problems cause stress which affects people’s mental wellbeing and can also have a direct impact on people’s physical health: overcrowded accommodation which makes it difficult to prepare food; lack of income which prevents healthy lifestyle choices.

Professor Genn is leading authority on the links between unmet legal need and ill health, an interest which grew out of her pioneering access to justice research. Often people will go to their GP because they don’t know who else to ask for help with things like filling in forms, writing letters, or dealing with benefits claims. Professor Genn’s earlier research had shown that legal problems often come in ‘clusters’: people who have one legal problem tend to have several of them. It also showed that vulnerable groups are more likely to have such problems but less likely to do anything about them, and unchecked legal problems can ‘trigger a cascade of crises’ that create illness or make existing illness worse.

In 2016, UCL’s Access to Justice Centre opened an integrated legal advice clinic at the Guttman Centre for Health and Wellbeing in Stratford, a diverse area of east London with high levels of deprivation in parts. The health centre is home to the Liberty Bridge GP practice and accepts patients from across the borough.

The legal advice clinic is led by solicitor Rachel Knowles and has a team of lawyers and case workers offering free legal advice on housing, welfare benefits, education and community care issues. Law students at UCL are also offered the chance to work there, either as volunteers or as part of their degree curriculum.

For Professor Genn, the launch of the integrated clinic was the realisation of a long-held ambition to locate community lawyers in health centres or GP surgeries. These are the places where people already go to and trust, which reduces the stigma and unfamiliarity that can otherwise act as a deterrent to seeking legal advice.

After some inevitable trial and error, the team settled on an approach which assessed patients’ health and wellbeing when they first sought legal advice, and then at three- and six-month intervals afterwards, using a combination of self-completion surveys, plus face-to-face interviews with a sample of participants. The final survey responses are still being collated and the research findings are yet to be finalised, but interesting patterns have emerged so far. Improvements in health are greater in those whose legal problems have been resolved, than in others whose legal problems are ongoing. The research is based on a health methodology, rather than a legal one.
The legal clinic is now operating full time out of its own separate offices, also in Stratford. Links with the surgery are continuing.
IMPACT 41: UCL innovation hub aims to improve lives of disabled people around the world

A UCL-hosted innovation hub is helping to accelerate the global development and provision of assistive technologies to improve the lives of all people with disabilities. The **Global Disability Innovation (GDI) Hub**, a collaboration of several institutions, is hosted by UCL’s Department of Computer Science and headquartered at Here East – part of the Queen Elizabeth Olympic Park. Born out of the legacy of the London 2012 Paralympic Games, it was launched by Mayor of London Sadiq Khan in 2016.

A recent £19.8 million project, funded by the UK’s Department for International Development (DFID), will support the GDI in delivering a new programme – **AT 2030: Life Changing Assistive Technology for All**. The aim is to reach more than nine million people, testing new approaches to assistive products and service design, as well as the markets which support their provision globally. The GDI is formed of an academic research centre and a non-profit, community interest company (CIC; a type a social enterprise introduced by the UK government in 2005). The CIC was set up in 2018 with assistance from UCL Innovation & Enterprise. Partners at the GDI include Loughborough University, the University of the Arts, London, the Helen Hamlyn Centre for Design and the London Legacy Development Corporation. The aim, over the next ten years, is for the GDI to become the leading place to research, study, practice and share disability innovation, globally.

Next year, the GDI Hub plans to launch a new MSc in Disability, Design and Innovation. Full scholarships will be available for disabled students as it grows a community of disability innovators.”

The programme, led by the GDI, will be delivered by a global partnership including the World Health Organization and UNICEF. Originally, the AT 2030 project was to be funded with £10 million from DFID, but after seeing “amazing early results”, the Minister of State for International Development, Lord Bates, announced a near doubling in investment to £19.8 million. This will be 100% matched by the private sector, country governments, academic institutions, NGOs and other partners.

An ambitious project starting in April 2019 is investigating the potential of using a combination of 3D scanning and 3D printing to provide customised prosthetics and orthotics (including footwear, splints and braces) to people with disabilities living in refugee camps, disaster relief and conflict situations.

**Project Lead:** Dr Catherine Holloway Academic Director, Global Disability Innovation Hub
UCL is bringing different creative organisations together to collaborate on projects, including innovative choreography, monitoring dancers’ health, and the benefits of dance for Parkinson’s disease.

The arts and creative industries are the fastest growing part of the UK economy, contributing £101 billion in value in 2017 – an increase of 53% from 2010. Yet, perhaps surprisingly, deep collaborations between the arts and the UK’s well-established scientific sector are relatively rare. Building on UCL’s existing academic connections with creative industries, UCL Innovation & Enterprise started to explore the possibility of growing these relationships into something wider, cross-disciplinary and long-lasting.

What formed was the multifaceted UCL Dance Network, which has so far gathered partners including the English National Ballet (ENB), Sadler’s Wells, Studio Wayne McGregor and The Place – working alongside various departments across UCL. The Network is starting to inspire new areas, such as a project to develop a remote sensor solution to monitor dancers’ performance and rehabilitation. Another project is pioneering novel, collaborative approaches to choreography. Projects in the pipeline include an exploration of the potential benefits of dance for people with Parkinson’s disease and workshops combining dance and coding to inspire young people into the arts or computer science (with funding from UCL Innovation & Enterprise).

Dr Robert Thompson (Impact Fellow, UCL Institute of Communications and Connected Systems) and Professor Sally Day (Professor of Photonics, UCL Electrical Engineering) too part in a three month secondment to the ENB, supported by UCL Innovation & Enterprise’s EPSRC secondment funding. Realising that adding health monitoring sensors to the dancers or their clothes might hinder creative expression and movement, they considered a solution for adding sensors to the environment instead. As a result, a UCL student project is now developing the idea of creating specialist dance flooring supported by accelerometers and gyroscopes. These can monitor dancers’ health over the course of each performance, as well as over entire seasons.

The English National Ballet was recently successful in securing a £1 million capital grant from the Good Growth Fund (the Mayor’s main regeneration fund). This acknowledged ENB’s collaborative work, including with UCL, and its potential to grow these partnerships in the future.

The UCL Dance Network is also actively engaged in collaborations with Studio Wayne McGregor – which has a world-leading reputation at the forefront of tech-arts innovation. The QuestLab project, funded by the Arts Council, is connecting choreographers from across the country, shortlisted by the Studio, to meet with academics with expertise in human-computer interaction, neuroscience, computer science, architecture, art, psychology and more. The project is stimulating new ideas, disrupting traditional ways of working and creating new relationships and networks. Studio Wayne McGregor is based at Here East – the 1.2 million square feet innovation space at London’s Olympic Park, where UCL also has a growing presence.

Project Lead: Jo Townshend, Senior Partnerships Manager, jtownshend@ucl.ac.uk
IMPACT 43: Citizen-led approaches to environment and air quality in London

UCL is pioneering new ‘citizen science’ approaches to environment and air quality issue in London, including the recently launched Camden Clean Air Partnership.

Professor Muki Haklay is co-director of the UCL Extreme Citizen Science group, which is dedicated to allowing any community, regardless of their literacy, to use scientific methods and tools to collect, analyse, interpret and use information about their area and activities. Muki founded UCL spinout company Mapping for Change, which uses a participatory geographic information system (GIS) with communities to solve the problems that they face - from neighbourhood management to monitoring air pollution.

For example, residents on an estate in Deptford suffered noise pollution from a local scrapyard, but with the help of Mapping for Change, residents used noise meters to take measurements throughout the day and night over two months, the Environment Agency revoked the scrapyard's licence. Residents also surveyed the estate's air quality; as a result, the local authority (Lewisham) installed diffusion tubes monitoring devices at the main junctions identified by the project as having higher levels of nitrogen dioxide (NO2). Mapping for Change also has worked with HACAN (Heathrow Association for the Control of Aircraft Noise) leading to a participatory map that was submitted to the Airports Commission examining the need for additional UK airport capacity.

In 2018, Muki worked with Camden Council to launch and chair the Camden Clean Air Partnership, which brought together residents, businesses, schools, universities and other key organisations in the borough to pioneer radical new ways of improving Camden's air together. The Camden Clean Air Partnership is helping to develop the Camden Clean Air Action Plan, as part of Camden 2025 - is a citizen-led vision for the future of Camden, which includes the goal of achieving WHO recommended levels for air quality by 2030.

Project Lead: Professor Muki Haklay, UCL Department of Geography, m.haklay@ucl.ac.uk
IMPACT 44: Londoners feel ignored and not represented by adverts

75 per cent of Londoners feel that adverts should reflect the diversity of the city’s population, yet fewer than one in four thinks adverts are culturally diverse, according to new research from the UCL Institute of Education. The research, which was commissioned by the London Mayor and the Greater London Authority, highlights the pressure that women and girls feel to achieve a specific beauty standard. The study focused on adverts in a range of public spaces that people would encounter in their day-to-day lives in the capital, and highlighted a discrepancy between the portrayal of women in adverts versus real life. Researchers found that fewer than one in three Londoners feel that adverts in the city are relevant to them, and highlighted the lack of diversity in cultural backgrounds, age groups or sexual orientation.

Professor Jessica Ringrose, lead researcher (UCL Institute of Education) said: "The lack of diversity in London’s advertising is largely due to the women we see being limited to a very narrow range of idealised body types and looks, which do not represent the diversity of London. Our findings showed people like and want a more diverse representation of people such as different, colours, size and body shape, ability, age and religions and cultures. Adverts described as the most empowering and positive were the ones described as the most diverse too."

The sexualisation of women and indeed men was the top answer given as to why respondents found advertisements inaccurate and unacceptable, with the most unacceptable adverts in London being women in revealing clothing (36%), followed by men in revealing clothes (34%). Two in three Londoners (68%) feel that women are often shown in revealing clothes when it’s not relevant in London adverts. Survey respondents were highly critical of photoshopping and the alteration of pictures. Over two thirds (69%) said that companies should state when they used photoshopped images.

The group feeling the least represented were women over the age of 55, who reported feeling 'invisible' and 'irrelevant'. Fewer than one in four respondents could recall seeing an advert featuring someone with wrinkles. Just 18 per cent of participants could recall ever seeing an advert featuring a disabled person, and the majority of men and women said they did not see enough images of disabled people. Those surveyed from the LGBTQ+ community also felt excluded, with just one in three feeling their sexual orientation was well represented.

To help address these issues, an advertising competition was launched on July 16 at the London Transport Museum by City Hall and TfL. The competition aims to support advertisers to create more positive and inclusive campaigns as part of the #BehindEveryGreatCity campaign. The competition, sponsored by Exterion Media and JCDecaux, will give brands the opportunity to win £500,000-worth of prominent advertising space across the TfL network - one of the biggest advertising estates in the world and seen by people on 31 million journeys taken on the network every day. Two short-listed campaigns can receive a prize worth £50,000 in digital advertising. Heidi Alexander, Deputy Mayor for Transport, said: "London is one of the most diverse cities in the world and our diversity is one of our greatest strengths, so it’s important we challenge the disparity between the women we see in our advertising and the women we see around us in our city. It is particularly concerning that some women feel pressurised by images they see in adverts around the city, and others feel completely overlooked or ignored. I want young women and girls from all backgrounds in London to feel empowered and valued when travelling around our great city."
IMPACT 45: The positive power of Urban Planning

A five-carriage train numbered 378 204 has a special place in the hearts of many of those at The Bartlett. This London Overground train was named Professor Sir Peter Hall, in honour of his contribution to the orbital London railway, which opened in 2007. Professor Hall’s ideas helped shape and progress not just the London Overground, but Crossrail 1 and 2, High Speed rail and many other developments in London.

Beyond the capital, the celebrated planner conceived many of the most influential planning ideas in the UK. These included enterprise zones, and the revival of interest in Garden Cities – which stemmed from his role as Chair of the Town & Country Planning Association. Hall also advised governments around the world and was known internationally for his studies and writings on the economic, demographic, cultural and management issues that face cities around the globe.

“Peter was driven by a belief in the positive power of urban planning to create the conditions in which all members of society could flourish,” says Dr Iqbal Hamiduddin, Lecturer in Transport Planning & Housing. “In pursuit of the goal to create ‘good cities, better lives’, pragmatism always prevailed over dogma, and he worked closely with politicians and governments of all persuasions.” Professor Hall was also a prolific writer with an engaging journalistic style, says Dr Robin Hickman, Director, MSc Transport & City Planning at The Bartlett School of Planning, “writing many of the most well-known books on urban planning. Ask any student of urban planning and they will point you towards their favourites.” In total, Hall authored or edited around 50 books, many of which are considered seminal texts. These include such noted works as Great Planning Disasters, Cities of Tomorrow, London 2000 and, most recently, Good Cities Better Lives.

When it came to the world of planning, he had an encyclopedic mind. According to Bartlett School of Planning Professor Matthew Carmona, Hall also had a forensic knowledge of trains that stretched to the history behind old lines and stations, and exactly where to get on and off the tube across London for the most efficient journey. Sir Peter Hall (1932–2014), the Professor of Planning and Regeneration at The Bartlett School of Planning, died in 2014, the year The Bartlett School of Planning marked its own centenary. His last research project was Sintropher – a five-year collaboration with the aim of enhancing local and regional transport provision to, from and within five peripheral regions in North-West Europe.
IMPACT 46: The future of LGBTQ+ night-time spaces

Research by the Urban Laboratory has found that the number of LGBTQ+ venues in London has more than halved in the past decade, eroding a crucial social infrastructure. A proliferation of closures of night-time and day-time venues serving London’s LGBTQ+ communities in recent years has led to the creation of campaign groups fighting to protect threatened establishments and to re-open long-standing venues that have already closed.

Growing unease around the closures has been well documented in the local and national press, and widely acknowledged by LGBTQ+ communities and organisations, as well as by the Greater London Authority (GLA) and the Mayor of London, Sadiq Khan. Yet, the evidence for what has been happening was largely anecdotal and piecemeal.

To provide more robust evidence, Urban Lab began researching London’s LGBTQ+ nightlife in May 2016. We wanted to understand the factors driving closures, on-going threats to venues and the impact on members of London’s LGBTQ+ communities. The first phase of our research was designed in collaboration with Raze Collective (which represents LGBTQ+ performers) and Queer Spaces Network (a group interested in supporting spaces for the LGBTQ+ community). This pilot examined LGBTQ+ nightlife in London between 1986 and the present – 1986 being the year when the Greater London Council was disbanded, which instigated significant shifts in urban regeneration policy and practice.

Combining archival research, surveys, public workshops, interviews and literature reviews, the research evidenced – for the first time – the recent intensity of closures among London’s LGBTQ+ nightlife spaces and demonstrated significant impacts upon the most long-standing and community-valued venues. The findings illuminated the distinctive diversity of the capital’s LGBTQ+ nightlife and the important contributions that venues make to neighbourhoods and community life, wellbeing, culture and the night-time economy. However, the research also highlighted unequal representation, power dynamics and access to space within LGBTQ+ communities.

In other words: how members of LGBTQ+ communities have been affected by closures and threats to venues is not clear cut. It is shaped by intersecting structural oppressions and aspects of people’s identities and experiences, including age, ethnicity, gender, sexuality and disability. For instance, venues serving women and Black, Asian and Minority Ethnic (BAME) LGBTQ+ communities have been disproportionately vulnerable to closure. However, the most prominent media, activist and community conversations largely focus on venues that have predominantly served communities of white, cisgendered, gay men.

Recognising the significance of these findings, the Mayor of London commissioned Urban Lab to develop the project further in order to positively inform his new Cultural Infrastructure Strategy and the work of the newly appointed Night Czar, Amy Lamé. In this second phase of work, we ascertained that the number of LGBTQ+ venues in London had fallen by 58% (from 121 to 51) since 2006.

News of this dramatic drop received high-profile press coverage, including on BBC London News and ITV News, and in The Architects’ Journal, The Daily Telegraph, The Economist, The Guardian, Time Out and The New York Times. Behind the statistics, Urban Lab’s research identified three key factors driving closures: the negative impacts of large-scale developments on venue clusters; a lack of safeguarding measures in the existing planning system; and the sale of property or change of its use by landlords. Venue owners, operators and clients have severely limited negotiating power.
compared with large organisations, and disproportionate rent increases were often implemented in the context of redevelopment and/or gentrification.

Beyond accounting for licensed establishments, we also highlighted the need to recognise the significance of LGBTQ+ nightlife events, hosted in a range of venues, in order to capture a comprehensive understanding of London’s LGBTQ+ nightlife. Doing so evidences a growing number of events serving women, trans, non-binary and BAME communities, who would otherwise lack dedicated venues (which are overwhelmingly owned and managed by – as well as predominantly serving – white, cisgendered, gay men).

Findings also showed that long-standing events have important and enduring social outreach functions and value to LGBTQ+ communities, and illuminated a resurgence of venues in South-East London, where LGBTQ+ nightlife existed historically but had declined until recently. Our findings were documented in the report ‘LGBTQ+ Cultural Infrastructure in London: Night Venues, 2006-present’, released in July 2017 and will inform the GLA’s forthcoming Cultural Infrastructure Strategy. In the short term, the research findings have already shaped the Mayor’s LGBTQ+ Venues Charter – a pledge designed to help safeguard venues for London’s LGBTQ+ communities and to act as a tool for communities and developers to work productively with the GLA and Night Czar to retain and re-provide venues.

Beyond planning and policy realms, Urban Lab has presented findings from the research in a range of settings such as Tate Modern, the Science Museum, Sutton House, the Peckham Festival and the Royal Academy of Arts. The research is now moving into a new phase, which will see it include further historical and international comparative work.
IMPACT 47: East Londoners boost their workplace skills

With the ongoing expansion of UCL into East London (UCL East), we aim to contribute to improving the employment prospects of local people. In an area of London that is going through significant changes, the UCL Institute of Education (IOE) is working closely with local colleges and employers. In partnership, they’re providing students with the opportunity to enhance their skills for the workplace.

A recently completed two-year programme, ELVET (East London Vocational Education and Training) helped pave the way to providing a qualified local workforce for the fast-growing digital, creative and social care sectors. More than 700 learners and over 200 employers gained from participation in the programme, which was funded with a grant from the JP Morgan Chase Foundation.

Professor Ann Hodgson, Programme Director for ELVET, explained: "Further Education colleges have a central role to play in skills development for both young people and adults. The ELVET programme supported colleges to build new, deeper and more sustainable partnerships with key employers in three sectors crucial for the economy."

Four local colleges took part in the programme: New City College Hackney, Barking and Dagenham College, Newham College and New City College Tower Hamlets. Each college worked with local employers to develop a particular area of expertise in relation to the changing demands of the workplace.

New City College Hackney focused on providing the skills needed for the digital sector. It aimed to enable young people under the age of 24 to progress into Level 3 and degree apprenticeships. It also helped local industries recruit from a wider talent pool that more accurately reflects the local community. At least 100 students took part in a ‘bootcamp’ with activities designed to prepare learners for progression to further education and employment using digital skills. Barking and Dagenham College focused on employment in health and social care. The college developed partnerships with small and medium-sized enterprises (SMEs) in the care sector to help upskill their workforce and introduce assistive technologies, where appropriate. New City Tower Hamlets specialised in the creative and cultural industries, recruiting more than 10 employers, mostly SMEs, to participate in the programme. It helped students to develop the soft skills required to access employment in this sector. Newham College focused on developing ways of improving partnerships between employers and the colleges across East London. It provided research support to each of the other three projects.

According to Professor Hodgson: "The lessons learnt from this experience are now influencing the way these colleges work and are being extended to other sectors of the economy and other neighbouring colleges."

In particular, the relationships built between employers and colleges went beyond the traditional concept of ‘skills supply’, where employers articulate what they want, and colleges provide learners with those skills. Instead, the focus was on employer-provider ‘co-production’ – a two way dialogue between colleges and employers that allows for greater levels of innovation and skills development.
More than 4,000 Londoners benefited from UCL student-led volunteer projects last year. Many also received assistance via externally run volunteer programmes supported by the university. Over 2,200 UCL students participated in the various programmes, devoting more than 62,000 hours of their time. These numbers continue to grow, year on year.

Placements are organised by The Volunteering Service, funded by UCL and based within the Students’ Union. One of the largest university volunteering departments in the country, it has a vetted, curated list of some 400 community organisations looking for volunteers. These range from mental health charities to neighbourhood centres, from environmental charities to small museums. “We’re defined by London, and the enormous range of opportunities that exist here,” explained Volunteering Manager John Braime, who founded the Volunteering Service in 2002. “We’re able to offer our students and staff volunteering opportunities that don’t necessarily exist in other parts of the UK.” Such opportunities exist London-wide, with a particular focus on areas represented by UCL, including Bloomsbury, King’s Cross, Holborn and Stratford.

“We’re very much focused on volunteering as an opportunity to get out of the uni ‘bubble’,” said John. “It allows students to interact with people who aren’t students themselves. This broadens the range of people they come into contact with, and is beneficial in terms of both personal and professional development.” Volunteers work with the young, elderly, homeless people, people with disabilities and refugees, among others. “We have a very diverse community here at UCL,” said John, “and London is a very diverse city. It’s an important exercise in community building, linking the skills within the university directly to local communities.”

The Volunteering Service team works in three broad areas: brokerage, one-off opportunities for volunteering and student-led projects. In terms of brokerage, most students use the Volunteering Service’s directory to search for roles. When requested, staff are also happy to assess applicants’ skill sets, then look to place them with suitable organisations. “Our job is to make sure that those roles are good quality, well-managed, and easy for students to find,” said John. One-off opportunities are for those who wish to volunteer, but do not have the time to do so on a regular basis. This might mean working at a festival, an environmental conservation day or a fundraising event. Meanwhile, a large number of community-facing projects are student-led. Members of the team assist with setting up and running them.

“We have a number of projects in local schools, including sports coaching,” said John. “We have law students volunteering within the justice system, medical students volunteering with healthcare and carers’ organisations, students baking with older people. There’s a clothing bank to assist homeless people, a project to befriend newly-arrived refugees.”

On the heritage side, UCL students work at several of the capital’s smaller museums, which depend on volunteers in order to operate effectively. The Jewish, Canal and Foundling Museums are among those to benefit from UCL input.
IMPACT 49: Capturing the past

Children at a Camden primary school have developed a time capsule in an innovative project supported by UCL. Staff from UCL Special Collections and the Museum of London Archaeology worked with pupils at Edith Neville Primary School, creating class archives that will go into the time capsule. It will be buried on the school site next year.

The project was designed to encourage the children to explore the notion of keeping objects for the future and finding things from the past. This was achieved through a series of workshops. As a first step to exploring the idea of creating an archive, parents and teachers at the school’s Summer Fair decorated a model tree with memories written on paper leaves. The model itself was made by two parents at the school. "It was important for us to make sure we included as many members of the school community as we could," explained Vicky Price, Special Collections Education Coordinator at UCL.

Years 1, 2 and 3 discovered the content of an imaginary ‘mystery’ archive, based on children’s book The Gruffalo. Years 4, 5 and 6 predicted the future and wrote letters to their 19-year-old selves. Pupils also used their drama skills to predict what life might be like in ten years’ time.

"We have seen pupils of all ages excel at work that utilises their imagination," said Vicky. "This project was designed for a particular school and set of circumstances, but we have developed workshop content that can be used with future classes. We hope to develop these ideas further so that we can offer schools a workshop that serves as an introduction to archives."

A mobile exhibition exploring the history of East London is also touring libraries and care homes in the London Borough of Newham. Organised by UCL Special Collections and the local council, the exhibition is accompanied by other interactive events such as workshops. Not only do these events provide local people with the chance to discuss and tell their stories, they're also generating an invaluable archive of oral histories - recorded and preserved for future generations.

"The exhibition has acted as a centrepiece around which engagement activities have taken place," explained Vicky Price, Special Collections Education Coordinator at UCL Special Collections. "We lead workshops that were designed to welcome and encourage local residents and library users to engage with the exhibition. They included poetry sessions for adult groups, a family workshop (creating games with historical figures from East London), and a history ‘open mic’ event." Initial workshops were delivered in October 2017 as part of Newham Heritage Week and acted as an opportunity to celebrate Newham’s rich cultural heritage. To date, 100 people have participated in the workshops. Peoples’ stories, experiences and memories of East London have been recorded by student volunteers. The collection will be catalogued and transcribed by Special Collections volunteers, forming a strong grounding - and acting as a pilot project - for the new London Memory Archive. This is a new initiative in development for UCL’s forthcoming East London campus.

Recordings will be made available for all to use - researchers, academics and members of the public - through Special Collection’s reader service. It is hoped they will be used to teach courses such as the future MA in Public History (UCL East campus) and the BA in Education Studies. The recordings will also be used as a key resource in further Special Collections outreach projects.
UNIVERSITY OF EAST LONDON

IMPACT 50: Well Communities: improving health and well-being in London

The Institute of Human Health and Development (IHHD) at the University of East London has designed, implemented and evaluated an array of long-term programmes and targeted interventions to improve health and well-being and community participation across London. IHHD programmes are often piloted and implemented in the Borough of Newham and adjacent East London localities, areas that have the greatest social and economic inequalities and in communities that are the most ethnically and culturally diverse in both London and the United Kingdom.

One project example is Well Communities, an innovative holistic framework that enables communities and local organisations to work together to improve health and well-being and reduce inequalities. Communities, at the neighbourhood level, are supported to develop skills and knowledge to improve health and well-being, build community resilience and reduce inequalities in accessing services. Conceived as a long-term mainstream project, Well Communities integrates with, strengthens, and adds value to what is already provided locally, in order to maximise synergies with third and public sector resources.

Well Communities comprises two suites of activities:
- Themed projects developed around the needs and issues identified by each community. These can include activities to promote healthy eating, physical activity, mental health, employment, improved green spaces and culture and arts.
- ‘Heart of the Community’ projects that build skills and confidence. These focus on community engagement, training, local coordination, volunteering, and engaging and developing the skills of young people.

Started in 2007, as Well London, the project has worked with 33 London neighbourhoods, across 20 London boroughs. In the project’s 2nd phase reached nearly 19,000 participants from Brent, Camden, Greenwich, Hackney, Lambeth, Lewisham, Newham, Southwark and Tower Hamlets. Results from this phase are contained in the table below:

Table 1. Targeted versus achieved outcomes for the Well London project

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Indicator</th>
<th>Level of change</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Targeted</td>
<td>Achieved</td>
</tr>
<tr>
<td>Participation</td>
<td>Number participating in all programme activities</td>
<td>7,000</td>
</tr>
<tr>
<td>Physical activity</td>
<td>% reporting increases in levels of physical activity</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>% reporting reduction in sedentary behaviour</td>
<td>5%</td>
</tr>
<tr>
<td>Healthy eating</td>
<td>% reporting progress towards meeting five a day</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>% reporting decreases in unhealthy eating</td>
<td>15%</td>
</tr>
<tr>
<td>Mental wellbeing</td>
<td>% reporting an increase in mental wellbeing</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>% reporting a reduction in psychosocial stress</td>
<td>15%</td>
</tr>
<tr>
<td>Social connectedness</td>
<td>% reporting an increase in social connectedness</td>
<td>10%</td>
</tr>
<tr>
<td>Volunteering</td>
<td>% reporting an increase in levels of volunteering</td>
<td>3%</td>
</tr>
</tbody>
</table>
Well London has been recognised nationally and internationally by: the ‘What Works Centre for Wellbeing’ (2015), as a ‘pioneer’ and model for community engagement approaches in health and wellbeing; ranked amongst 41 ‘best practice approaches’ across Europe by CHRODIS (2015); won a RSPH Award at the highest level in 2011 and was endorsed by Professor Sir Michael Marmot. The scheme has been supported by Big Lottery funding and the Mayor’s Office. By co-producing with local communities the activities and programmes that meet their needs and aspirations, Well Communities provides spaces for communities to come together and engage to build a stronger, more inclusive and vibrant society.

Professor Gail Findley, g.findlay@uel.ac.uk
The Sustainable Research Institute (SRI) at the University of East London brings together research and development of innovative eco-efficient technologies and processes, focusing on changes in the physical infrastructure that benefit the environment and promote a carbon-neutral society. With over half the world’s population living in urban environments, and the consumption and extraction of natural resources to produce goods and services is more than our planet can replenish, SRI engages in innovation, research, partnership building with industry, small businesses and local authorities in ways to devise solutions and initiatives to change our behaviour and address the climate crisis.

Research within the institute focuses on three key themes that address challenges to urban and rural sustainability:

- **Green Infrastructure** – spanning areas such peatland ecology and conservation, the design and monitoring of urban green infrastructure and invertebrate conservation;
- **Resource Management** – encompassing materials engineering, energy efficiency and the circular economy;
- **Sustainable Living** – covering adaptive governance, community engagement, behavioural change and asset management.

The Institute’s Research is developed to have global applicability, with many past and present projects involving networks of international partners. However, a key focus of SRI activity lies in their location at the heart of London’s largest regeneration area in Docklands, East London. Many of the projects conducted by SRI are based in London in partnership with local authorities, charities and housing development companies. The SRI also works in tandem with SMEs based in London and beyond, to develop ideas and help bring them to market. They include a strong focus on locally contextualised solutions and are delivered in consultation with local communities to address urgent needs and to improve the quality of life for residents.

An example of this is the Urban Green Infrastructure (UGI) Research where the loss of biodiversity through urbanisation has numerous environmental impacts:

- urban heat island effect;
- localised flooding;
- air pollution exacerbation;
- reduction in water quality and the quantity of water held in the soil;
- reduced possibilities for contact with nature resulting in a reduction in the health and well-being of communities.

The incorporation of UGI into cities can help alleviate these problems and contribute to the provision of services of benefit to humans (ecosystem services). In order to reverse these negative environmental impacts, it is necessary to understand how these systems function, interdependencies between them, and develop conservation and management strategies in order to build resilience and ensure sustainability.

Research staff from the SRI have been investigating how UGI can be designed to maximise the ecosystem service benefits in relation to the needs of a place, and to maximise the biodiversity benefits for conservation. Key projects delivered in London include:

- TURAS – working with Barking Riverside Ltd to develop UGI design guidance;
- Biodiversity Hotspot Mapping – working with university facilities teams (including UEL and City University) to identify and improve campus landscapes for biodiversity.
- Olympic Park – monitoring and providing habitat management guidance for greenspaces across the park.

Results from these projects have been fed back into planning guidance (Tower Hamlets SuDS Guidance, GLA biodiversity in new developments guidance), local UGI strategies (Poplar HARCA, Royal Docks, Thames View Ripple Road cycleway), and to international networks (TURAS toolkits, CONNECTING Nature UrbanByNature webinars, Oppla Platform).

Professor Darryl Newport, D.J.Newport@uel.ac.uk; Dr Stuart Connop, Senior Research Fellow, s.p.connop@uel.ac.uk.
In 2015, Dr Lindsay Keith, a Creative Research Fellow at the University of Greenwich School of Design established and ran the first SMASHfestUK festival in Deptford, London. The festival, an innovative arts, tech and science event co-produced with Middlesex University and The Refinery, has run every year since. Based on research in the field of public engagement with the arts and sciences, the festival uses a Narrative and Inquiry Driven model of engagement (NIDS-M), which has proven extremely successful in drawing its target audience of under 16s in London and further afield. Each festival has a central theme based on an impending apocalyptic natural event, with exhibitions, arts events and experiments directly linked to this theme: “Asteroid”, “Solar Storm”, “Supervolcano”, and “Flood” give a flavor of what’s in store for visitors to the festival. As Dr Keith says: "By asking 'what if this disaster meant we couldn't survive or rebuild?' we're getting young people to use their creativity and skills to confront future challenges”.

From the start SMASHfestUK’s core mission has been to use the arts as a vehicle for widening participation and building diversity in science, technology, engineering and maths (STEM), areas that traditionally have an “elitist” problem. To address this the festival is underpinned by public engagement with research (PER) specifically by communities who are socio-demographically underserved and under-represented in STEM research and careers. This includes communities with high percentage of black or other minority ethnic people, and/or communities with multiple indicators for poverty and low socio-economic status (LowSES). Built into the SMASHfestUK model is a monitoring and evaluation dimension to assess the effectiveness of its approach against its core mission: so far 60,000 visitors have taken part, with 70% of visitors being black or of mixed heritage, as well as 62% being female. Further evaluation has shown that audiences such as these, who have been stereotypically referred to as “hard to reach” are not, but require interventions that are community focused, co-designed and easy to access.

To that end SMASHfestUK is different from other festivals in several key ways:

- It isn’t branded a “science” or “arts” festival
- It uses principles of storytelling, and a strong narrative theme (of a global threat to humanity) to unite the audience. All activities are related in some way to the theme.
- It is delivered in the heart of the underserved/underrepresented communities in public spaces, not in museums or universities
- It is free at the point of delivery

In November 2018, the festival won Outstanding Contribution to the Local Community at the Times Higher Education Awards, awards known as the “Oscars of higher education”. Earlier that year the festival won the Engineer magazine’s Collaborate to Innovate award, retaining it from 2017. In 2016 it won the Science, Technology, Engineering and Mathematics (STEM) category of the National Coordinating Centre for Public Engagement's bi-annual Engage Awards. Dr Keith says “To see SMASHfestUK grow like this is incredible. It is a great way of getting kids interested in science and to win such a prestigious award is a wonderful endorsement of the hard work by everyone involved.”

Project Lead: Dr Lindsay Keith, l.keith@gre.ac.uk
The August 2011 riots in London posed a monumental challenge to Scotland Yard - suddenly they had to identify thousands of suspects within a short period of time — and its computers seemed to be of little help. The riots cast a negative light on lawbreakers in London, but also attracted criticism of the police response. However, one unit of the Metropolitan Police Service (MPS) generated positive publicity: the Visual Images, Identifications and Detections Office (VIIDO). Whereas only one out of about 4,000 suspects from the riots was identified using computer software, officers from this unit identified all the rest.

The riots happened just after certain MPS police officers, who make a disproportionately large number of all suspect identifications from CCTV, had completed a battery of familiar and unfamiliar face recognition and matching tests, compared with a control sample of approximately 104 members of the public. Due to previous research on forensic identification using CCTV images, Dr Josh Davis (j.p.davis@gre.ac.uk), Reader in Applied Psychology at the University of Greenwich, was invited to carry out this research into the cognitive abilities of these potential ‘super-recognisers’ within the MPS. Those within the top two percentiles at face recognition, meeting the criteria of a ‘super-recogniser’ established by researchers at Harvard University in 2009, are police officers with extremely superior face-recognition abilities, able to memorise thousands of faces, often only fleetingly glimpsed. Recognition seems to be possible even in the case of variable conditions, or when a target’s appearance has changed, been obscured or disguised. Strikingly, the ability appears to be entirely unconscious.

Since 2011 Davis, together with his Super-Recognisers Greenwich team and as part of the LASIE consortium, has continued to work closely with the MPS, leading to changes in the management and distribution of CCTV images by them — substantially enhancing suspect identification rates. The primary aim of his work through LASIE has been the development of a test of superior face recognition to ensure the MPS can identify, and optimally deploy super-recogniser officers, staff and recruits.

Increasingly, he acts as a consultant to many other police forces (e.g. Australia, Germany, Singapore), and has presented his research worldwide (e.g. Australia, Bangladesh, Brazil, Canada, China, Russia, USA).

On issues related to identification verification he has consulted with a variety of businesses, such as Yoti, a London-based technology company. He has represented the University of Greenwich in partnership with Super-recognisers International, a London-based company specialising in CCTV investigation, and Neville Forensic Recognition, for which he provides the research expertise and testing on super-recognisers.

The role of Super-recognisers in the MPS, as well as police forces nationally and around the world has grown substantially since 2011. In 2014, super-recognisers were instrumental in locating murdered teenager Alice Gross. They viewed thousands of hours of grainy, low-quality CCTV and within days identified the schoolgirl and at-that-point unidentified suspect Arnis Zalkalns, allowing them to draw a timeline which eventually led the discovery of the schoolgirl’s body in the River Brent.

After dozens of men allegedly assaulted women at the main train station in Cologne, Germany, on New Year’s Eve 2015, Scotland Yard’s super-recognisers flew to Cologne to assist their German colleagues - German investigators faced a similar problem as they did in 2011: the sheer number of
suspects and victims made it hard for officers to analyse the data and video footage, mainly shot with mobile phones.

In September 2018, two super recognisers employed by the Metropolitan Police Force identified the Russian nationals later accused of the Salisbury Novichok poisonings, having sifted through hours of CCTV footage.

In August 2018, the Met announced it would abandon the use of facial recognition software at the Notting Hill Carnival (in previous years the technology had confused men with women – an embarrassing blunder), but that it would instead deploy super-recognisers, who it considered better able to accurately spot the faces of troublemakers in dense crowds.

As these superior face-recognition skills are used more and more effectively, it is also hoped that the perceptions of the general public – but most poignantly criminals – will be changed by the knowledge that their activities are more likely to be detected. This, in turn, might have a positive impact on crime deterrence. That is another research topic awaiting attention, but for now, what is clear is the role of research in getting to this point in the story.
UNIVERSITY OF LONDON

IMPACT 54: Putting humanities into the heart of London’s communities

‘Layers of London’, based at the University of London’s Institute of Historical Research, tells London’s social history through researching archival collections. The project works extensively with community history groups (including across London’s diaspora) and with schools to provide a portal for narrating and curating lost histories and for meaningful community engagement across the capital. Users can access free historic maps of London and contribute stories, memories and histories to create a social history resource about their area. The project brings together, for the first time, a really important collection of digitised historic maps, photos and crowd-sourced histories provided by the public and key partners across London, such as the British Library, The London Metropolitan Archives, Historic England, The National Archives, MOLA (Museum of London Archaeology) and a wide range of national and local archives, institutions, community groups and individuals. https://www.layersoflondon.org/

Being Human is the UK’s only national festival of the humanities, a celebration of humanities research led by the University of London, School of Advanced Study’s public engagement team in partnership with the Arts and Humanities Research Council and the British Academy. The nationwide festival brings together universities, museums, galleries, libraries, community and commercial partners. Working together it stages stimulating and engaging activities that make research accessible and relevant, strengthen community identity, and increase understanding of the relevance of the humanities to everyday life. The festival supports researchers in the humanities – from art history and classics, literature and languages, history and philosophy – to produce non-traditional events and activities with a strong emphasis on co-production and mutual benefit. Every year the festival features around 300 events across the country, working with 80 universities and research organisations in 50 towns and cities each year. London is a major festival hub and pocket of regional activity. https://youtu.be/dX6O1SsFnWs

As part of an annual collaboration with the Tate Modern, the University of London’s Institute of Philosophy engages non-traditional museum and gallery attending audiences. At Tate Exchange philosophers, psychologists, neuroscientists and artists offer sensory experiences-cum-experiments for the public. The themes cover a range of senses: Tasting at Tate, Sensoring Ourselves, Moving Bodies (realised in collaboration with Studio Olafur Eliasson). The events series was described as the best attended and most innovative in the Tate Exchange programme, which invites the public to play, create, reflect and question what art can mean to our everyday.
The estimated value of London Purpose Built Student Accommodation (PBSA) stock is currently over £17.5 billion. More importantly the provision of good quality, well managed student housing is essential to the well-being of students. London is not a campus city and for students to navigate and integrate into the city, they need HEIs to provide them with secure housing for, at least, the first year. Over the last ten years the majority of new PBSA in London has been built almost exclusively as “luxury” accommodation by the private sector. Unlike cities such as New York, London has not required developers to build PBSA in partnership with an HEI, nor was there any requirement to provide affordable housing within their developments.

The University of London took a leading role in introducing effective student accommodation planning policy in the capital. We did this by building alliances with other stakeholders and gathering evidence on the need for a link with an HEI and an affordability requirement. Our research provided the evidence base for the emerging London Plan which addresses both these issues. We are currently negotiating within developers on three new developments, under the emerging London Plan rules, to provide over 2,500 additional bed-spaces to the students of the University of London’s federation.

As part of lobbying work carried out on the London Plan, the University of London identified that the London HE sector was, in too many cases, only peripherally involved in strategic planning carried out by Local Planning Authorities (LPAs) and the Mayor’s Office. In order to facilitate better dialogue between HEIS and local government we developed, in partnership with London Higher, a series of maps that showed HE Estates, PBSA and where students live in London within the Private Rented Sector.

The maps have been used both as a visualisation tool but also to spark broader conversations about HE and Local Government collaboration. A recent meeting with the LGIU (Local Government Information Unit) generated a range of suggestions for future strategic partnership work.

Additionally, the University of London is working on a study of student mental health needs in partnership with NHS London to enable a better understanding of student needs and to influence the commissioning of NHS services. This is the first attempt of its kind to assess the mental health and well-being needs of students across the capital.

The Guardian reported that “British universities are experiencing a surge in student anxiety, mental breakdowns and depression. There has been a sharp rise in students dropping out [...] and an alarming number of suicides.”

This work is in response to this crisis. The assessment will take a primarily “corporate” approach; eliciting the views of stakeholders on what services, and relationships between services, are needed. However, we will also undertake further data analysis on previous surveys, undertaken by stakeholders, to identify specific London trends.
Each week from October to December, 10 University of Roehampton students go to prison. Not just any prison either. HMP Belmarsh, one of the best-known prisons in the country, holds high profile detainees who are categorised as having a high likelihood of attempting escape or posing the highest risks to the public, as well as local prisoners sentenced at neighbouring Woolwich Crown Court and Belmarsh Magistrates Court.

It is in this high security environment that University of Roehampton students head to class, clutching handouts and notepads, ready to meet their 10 counter-part students who are fulltime residents of the prison. Together, these 20 students study a 10-week module called ‘Understanding Justice’, covering theoretical and practical aspects of criminal justice in the UK and completing an assessment which (if passed) will grant them 20 university credits. While a prison officer is always present, the course is designed and run by staff at the University of Roehampton, ensuring it meets the rigorous standards of any other third year module on offer to our undergraduates.

The University of Roehampton has been running this Criminology module with HMP Belmarsh since 2017 with great success. For Roehampton-based students, this is an invaluable opportunity to understand what life in confinement is like, and to learn the lesson that prisoners are people “just like us”. For students seeking to work in prisons, the probation or police service, or social work and other affiliated careers, this is a route to understanding how the system works.

For our Belmarsh-based students this is a real opportunity to engage with higher education at its best: developing a critical understanding of a range of real-world issues, in conversation with people from a range of different backgrounds to challenge and argue the status quo. Some have used this as a springboard to pursue further study with the Open University while they complete their sentence, while others have expressed a desire to pursue a degree upon release, having acquired a taste for debate and the intellectual stimulation that higher education brings.

It is appropriate that the University of Roehampton in the South West of the city and HMP Belmarsh in the East, span the breadth of this city. Each year, our students come from all corners of London and beyond. By opening up our provision to some of society’s hardest to reach people, we open up new ways of imagining what comes next in their life, and ask them to view themselves differently: not as prisoners but as students.
IMPACT 57: University of Roehampton’s partnership with The Upper Room: Impact on Homelessness Charity and Students

In the Department of Social Sciences at the University of Roehampton, the term “removing students out of their comfort zones” is taken literally. As part of their BA dissertations, a group of final year students have a unique opportunity to participate in ethnographic research in one of London’s Day Centre’s for the growing number of London homeless people – The Upper Room.

Students spend time at the Centre’s soup kitchen, talking to people, interviewing, observing and learning about the perils and hardships many Londoners face. “Students are asked to apply theory to reality. This is three-dimensional experience of Marx, Weber and Durkheim – classics of sociology, as students are immersed into the huge complexities of London’s urban poverty, homeless and destitution and have to make sense of it” – says the course convenor, Dr Michal P. Garapich, adding that “by being out of their comfort zone, they are able to see it from the outside, see how society constructs poverty, class and privilege allowing for better understanding of the problems London faces.”

For some students this is a hugely inspiring eye-opening experience. As one student recalls: “I am very proud of myself for being able to conduct such vital research for a charity. At times I have certainly pushed myself out of my comfort zone but I believe this research has helped open my eyes more broadly to the issue of homelessness.”

What’s crucial is that the experience is highly valuable for the other side too. Creating this open learning environment is also positive to the charity since it offers free evaluations of its projects, analysing and influencing their direct day-to-day operations and social dynamics within the Centre. The research that students conduct gives content to the charity’s fundraising activities with concrete outcomes in terms of funding (for example, the charity was able to secure Big Lottery funding because of one of the reports).

In essence, the relationship between the University and the charity is beneficial for both parties, giving students a perspective of working in the charity sector and poverty in London - in fact many students have chosen this career path - and at the same time offering the charity valuable expertise they use for fundraising and improving their services, and as a result helping people in hardship.

About this relationship, Nicky Flynn, Director of The Upper Room says, “The involvement of Roehampton University and especially Dr Michal Garapich, has huge benefits for us. The reports the students produced have offered great insight into how we work and how our beneficiaries view us and has informed our strategy going forward.”

Finally this experience initiates an ethical experience for students. By seeing with their own eyes and talking to people in tough situations, they are able to appreciate more fully what they have, feel the value of empathy, human interaction and social justice. Being out of our comfort zones may be uncomfortable, but in the end it makes us better people.
The School of Education at the University of Roehampton has a long tradition of offering teacher education, dating back to 1841. The teacher training colleges were amalgamated from four distinctive faith and humanist backgrounds and were all situated in different parts of London before relocating onto the current campus. Whilst the department welcomes people from all over the world, its roots are its London base.

In terms of teacher training, the University offers a range of routes into the profession. As well as offering direct to University recruitment, we also work with a number of School Direct partners located in the Greater London area. Each of these recruit teachers onto our shared teacher training courses in both primary and secondary age phases. In addition, we work with School Centred Initial Teacher Training providers to offer their students our Postgraduate Certificate in Education (PGCE) qualification. We have worked with at least 600 primary and secondary schools in and around London in the last three years. This collaboration with school partners helps to deliver hundreds of new teachers into the profession and the quality of this partnership was recognised in 2019 when the School of Education was nominated for the National Association of School-Based Teacher Trainers, ‘HEI Partner of the Year’. We were the only London provider to be nominated for this award. This recognised how we work collegiately with school partners to create genuinely personalised and impactful training.

We offer training to our partner schools to develop high quality mentoring. This supports continuing professional development that allows the workforce in London to grow and develop each year. The subject expertise that colleagues within the Department hold is shared with London teachers through a range of specific and generic training events that help to spread best practice. We also hold partnership meetings where senior leaders from schools come together to share expertise and learn from each other.

Many former students go on to be senior leaders in London schools. Our former students value the experiences that their time at the University of Roehampton offered them. 100% of our Newly Qualified Teachers who joined the profession in September 2018 (and responded to our survey) said that the course had prepared them well to make the transition into their first post. 94% stated that the course had prepared them well for the day-to-day demands of being a teacher.

We celebrate our London location with our students and encourage them to make the most of the rich variety of educational opportunities that the capital has to offer. We run a number of outreach initiatives with projects such as Teen Tech, which encourages pupils to develop a passion for design and technology. Teen Tech’s patron and TV Presenter Maggie Philbin commented that, “The University has provided enthusiastic support for our TeenTech London Festival days at The Emirates Stadium which bring together over 50 London schools and 48 interactive challenges from global technology companies. Students have described experiences at these events as ‘life changing’ and we have seen the long term impact as teachers then decide to enter entire year groups into the national TeenTech Awards programme, where again Roehampton are involved as judges for the Teacher of the Year and Future of Education categories.”
The Volunteering Service within the University of Westminster is an extensive and valuable facility committed to encouraging community engagement and revitalisation within the local area and beyond. The University has worked with over 320 charities to give back to the local community, with over 23,000 volunteering hours being undertaken in the past year. The University is regularly involved in volunteering opportunities in the local area and beyond, with over 1,000 vacancies being offered for volunteering work.

The Corporate Social Responsibility Team, who run the volunteering service, works in tandem with the University’s Being Westminster strategy, helping to create a sustainable and engaged university on a local, national and global scale.

Volunteering is a key component of community engagement, beneficial not only to students but to the local area. The volunteering service also provide roles that serve private sector businesses or public or community initiatives like local schools. They work with social enterprise businesses, whose main aim is to respond to a social problem, such as an eco-friendly bike scheme.

Available to all students at the University, the service oversees many different types of volunteering, from working within the University, external volunteering, one-off volunteering for those who cannot make a regular commitment, as well as regular volunteering for those who may want to work with a charity for a longer period of time.

For example, one student has continued her volunteering work from a young age into her university life. She said: “I have changed for good by volunteering with St Johns Ambulance when I was 15 years old, starting out as a Cadet. “I went on to become a youth leader teaching first aid to cadets before coming to University, only to continue my volunteering journey and become the Unit Manager to Westminster LINKS, First Aid Society and the student volunteering unit of St Johns Ambulance. Volunteering isn’t about having to do something, it’s about wanting to do it, and what you do makes a difference.”

Through the external service, students have the opportunity to volunteer with over 300 charities, including work with heritage centres such as the Black Cultural Archives and with medical advocates like Chain of Hope.

Our latest volunteering and work experience fair, titled #LevelUp, invited not only national charities such as Age UK, Mind and OCD Action, but also smaller, London-based charities like Bow Arts Trust, which delivers arts and creative services to support community renewal. Others include KEEN London, who work with children and young adults with special needs, offering them sports, games and arts activities in a safe environment.

Speaking about the University’s volunteering and its implications on the wider community, Head of CSR Andy Norris said: “Connecting with local, national and international communities, and the people and concerns that lie within them, is one of the many proven benefits of volunteering. Our students spend on average 24,000 hours volunteering over the academic year and nearly 70 per cent said volunteering helped to make them feel part of the wider London community.” Volunteering is a key component of community engagement that supports the aims of the University as an organisation.
IMPACT 60: University of Westminster Legal Advice Clinic

The University of Westminster Legal Advice Clinic, also known as the Student Law Clinic, offers a free student-delivered legal advice service to the local community relating to a variety of issues that individuals may face, including legal cases relating to family, employment, immigration and housing law.

Due to its recent expansion, the Clinic has been able to more than triple its services offered to the community, now having the capacity to assist around 140 clients per year free of charge. For example, the Clinic has recently helped a single mother facing breach of order on child arrangements, by writing an advice letter to help her understand her options and advised suitable courses of action.

Practising solicitors or barristers supervise each of the student-led services, providing the community with legal advice from law professionals as well as Law students. The team are able to provide support in interviewing clients, drafting court documents and giving professional advice free of charge.

The Student Law Clinic was recently awarded generous funding from the Quintin Hogg Trust, with the aim to progress the pro bono law sector and contribute towards a richer, happier society. The funding from the Quintin Hogg Trust has allowed the Clinic to expand its services and redesign its premises, allowing it to offer triple the number of free legal advice sessions to the public, to increase the number of Westminster students working within the Clinic and to produce online legal information.

The expansion has funded five new practicing law professionals to act as clinic supervisors for family law, four new professionals, including one former judge, for housing law, and five solicitors for employment law. The Clinic has also recruited one immigration caseworker and operates an immigration clinic fortnightly. Further equipment has also been purchased including new laptops to increase efficiency in service provision.

As well as its own work, The Student Law Clinic maintains close links with a number of local charities and organisations, including Z2K and Hestia. The Clinic also has a close relationship with the University of Westminster Career Development Centre to facilitate providing sufficient pro bono support and advice to the local community from Law students across the University.

Discussing the Clinic’s impact on the community, Clinic Director Hannah Camplin said: “Following the Legal Aid Sentencing and Public Order Act 2012, many people who used to qualify for legal aid to access a solicitor for free or at lower cost no longer have this option.

“The University of Westminster Legal Advice Clinic provides free confidential legal advice to the London community, increasing the numbers of people in London who can access legal advice and information to help them with a legal problem. This service, provided by our Law students and our supervisors (all qualified legal professionals), also allows Londoners to feel that someone has listened to them and is trying to help, thereby increasing their well-being.”
IMPACT 61: The Regent Street Cinema

The Regent Street Cinema is based within University of Westminster and is an inspiring space promoting the importance of cinema for all. The Cinema opened in 1848 and is renowned for having shown the first screening of moving footage to a paying audience in the UK, which was a short movie about a train by the Lumiere Brothers.

After undergoing refurbishments, in 2015 the birthplace of British Cinema opened its new state-of-the-art auditorium to the public as a unique arts venue for screenings, lectures, workshops and events, and has become a landmark for film in the heart of London’s West End.

As well as their standard cinema schedule, the cinema organises a range of community-based initiatives in partnership with the University of Westminster. The team are committed to providing enriching and community-based opportunities, such as their Matinee Classics that run every Wednesday.

The cinema’s Matinee Classics are targeted towards people aged 55+ living in isolation and include a ticket to a cinema screening, free drink, dance class and organ recital for £1.75. These showings were such a success that the Cinema increased the screenings to two showings every Wednesday. This year, almost 10,000 people attended the Matinee Classics screenings.

As well as this, the Cinema also promotes the wellbeing of the elderly through their community initiatives. The Cinema proudly supports the Silver Sunday initiative from the Sir Simon Milton Foundation, a powerful vehicle to draw attention to the problem of loneliness amongst older people.

The Cinema hosts Silver Sunday around three times a year, with over 120 guests aged over 65 attending the latest screening, where attendees watch classic films free of charge that were released during their childhood.

For younger audiences, The Kids’ Kino Club invites children and parents from local communities and across London to screenings that run every Saturday morning, showing children’s films for a heavily discounted price to ensure they are accessible for all. Films include recent releases as well as old favourites.

The Cinema also collaborates with the London-based charity Into Film to provide free screenings and workshops throughout the year to support the education of young people by raising educational achievement and enhancing cultural access and development.

The Regent Street Cinema is committed to working in partnership with the local community to develop and deliver enriching experiences based around the Cinema’s heritage, ensuring they are accessible to those from all backgrounds and abilities.

The Cinema is committed to continuing the legacy of the Polytechnic Institute’s founder Quintin Hogg, promoting inclusivity and education for all.
A group of researchers led by Dr Ohl and Dr Jayman are carrying out research in young people socio-emotional wellbeing. They have operationalised the outcomes of this research through interventions in schools known as ‘Pyramid clubs’. Pyramid clubs are a short-term, school-based, early intervention that support children (aged 11-14 years) with social and emotional difficulties who internalise those difficulties. The intervention aims to help building children’s confidence, coping skills and their relationships with peers and adults. Evaluation of outcomes for each club shows that around 70% of those attending make some/considerable improvement in socio-emotional well-being, with an equivalent effect across gender, ethnic and socio-economic status, and that this improvement was sustained at 12-month follow-up.

Additional findings in the secondary school cohorts suggested a possible ‘buffering’ effect of Pyramid on the ‘dip phenomenon’ (a decline in attitude to school and learning characteristic of participants’ developmental stage) for those who attended clubs. Furthermore, qualitative findings revealed an impact on educationally relevant behaviours, or ‘academic enablers’, e.g. improved confidence and social skills contributed to pupils’ increased participation and engagement in classroom learning. Research into this model started in 2004, and the interventions have been deployed nationally. Since April 2013, 415 primary school clubs and 76 secondary clubs have run Ealing Council was one of the early beneficiaries and it now deploys these interventions in both primary and secondary schools in the borough. The work has been nationally recognised by the inclusion of both Pyramid interventions (primary and secondary) in The Early Intervention Foundation (EIF) online guidance.

The EIF is the national What Works? Centre for early intervention.

https://www.egfl.org.uk/services-to-schools/pyramid-club-201920
IMPACT 63: Addressing Rape Myths in Policing

Research led by Dr Ben Hine and Dr Anthony Murphy on attitudes held by police officers in the Metropolitan Police Service (MPS), and the judgements they make towards rape cases, has directly resulted in changes to training delivered to both first-responding and sexual offences investigation trained officers. Specifically, training packages designed by the researchers are currently delivered to all new recruits. The impact extends to a collaboration with the Mayor’s Office for Policing and Crime (MOPAC), where the researchers have created and implemented the use of a new comprehensive coding tool for examining routinely collected Crime Report Information System reports. This coding framework has allowed Hine and Murphy, in co-operation with MOPAC and the Metropolitan Police Service (MPS), to produce predictive models of attrition and further training opportunities for officers. Importantly, this will be the first project to explore the attritional pathways in male-on-male cases, and Dr Hine has directly contributed to the inclusion of male victim-survivors of domestic and sexual violence in Crown Prosecution Service and Home Office policy.
IMPACT 64: Regeneration in East London post 2012 Olympics

Dr Penny Bernstock has published extensively on this topic since 2005 and has become one of the leading commentators exploring the experiences of residents moved out of the Olympic Park as a result of adverse housing policies. She has interrogated the housing legacy through a longitudinal analysis (across the period 2000 to 2019) of all new housing developments to establish the proportion of affordable. Her research stance is informed by London’s commitment in its 2012 bid, to deliver a lasting legacy for local communities in East London, who are over-represented on a range of deprivation indicators.

Her research shows that despite this commitment, thousands of new homes, built or in the pipeline, are in the main exclusive accommodation for professional workers rather than for existing residents. She has exposed the fallacy of ‘affordable housing’ as a substantial part of what is described as affordable housing bears no relationship to local incomes. She has highlighted the resulting housing problems in the legacy boroughs, with Newham experiencing a massive increase in homelessness and the highest number of families housed out of the borough.

The impact of her research was recognised and widely cited in a range of media and by official policymakers. Her connection with ‘Citizens UK’ as co-chair of the Citizens UK’s Newham Olympic Legacy Committee, has enabled her to use her research findings for the public good. She has produced user-oriented information to East London Community organisations, and has delivered briefings to help the local community decipher complex planning policy. She has also engaged with the formal policy process by objecting to a large planning application that included no genuinely affordable housing. She will be giving evidence later on this year at the examination in public of the local plan. Penny describes herself as a public sociologist using research to inform public debate.

Penny is working with Citizens UK to ensure that the legacy commitments are adhered to, and that the Community Land Trust Housing becomes part of an intermediate housing offer that is genuinely affordable and remains affordable in perpetuity. Through this work, Penny is seeking to secure a massive increase in the proportion of social rented housing, in response to the 66,000 households on waiting lists across the legacy boroughs.

https://www.youtube.com/watch?v=AR1WDpgI3mA&_ga=2.199363117.246522471.1555323236-979597147.1555323236
IMPACT 65: Prevention of healthcare associated infections in NHS hospitals (Epic 3)

Healthcare associated infections (HCAI) cause harm to patients and consume NHS resources. The Richard Wells Research Centre at University of West London has made a sustained contribution to preventing HCAI through the production of the Epic - National Guidelines for the Prevention of Healthcare Associated Infection in NHS Hospitals in England. The Epic guidelines provide comprehensive recommendations for preventing HCAI in hospital and other acute care settings based on the review and synthesis of best currently available evidence. First published in 2001 the national guidelines were updated and revised and in 2007 (Epic2) and in 2014 (Epic 3); the latest iteration is accredited by the National Institute for Health and Care Excellence. Epic guidelines have influenced Government policy over two decades, and formed the basis of national strategies that significantly reduced important HCAI pathogens such as meticillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (C.diff) and informs infection prevention and control policy and practice across NHS, private and voluntary healthcare provider acute settings nationally and internationally.

The guidelines have been adopted and implemented by all NHS Hospital Trusts and private healthcare providers in London to enhance patient safety and reduce the risk of patients acquiring an infection during episodes of health care. The 2014 guidelines are part of a suite of tools made available to these trusts by NHS Improvement to combat antimicrobial resistance and in particular bloodstream infections caused by *Escherichia coli*. In addition, they are used by healthcare industries within the capital (GAMA Healthcare, 3M and BD) to underpin their educational activity and inform innovation. Our research on critical challenges to applying best practice has been linked to changed policy and practice related to the use of gloves in London hospitals (Great Ormond Street Hospital for Sick Children, Royal Free London NHS Foundation Trust, Imperial Healthcare Trust, Guys and St Thomas’s NHS Foundation Trust) improved patient safety and reduced NHS costs, and had led to strategies to improve the management of urethral catheters across the healthcare economy.
The evolution of the UK street gang agenda has formed the focus of Professor Simon Harding’s research. This has included specific inquiries into the relationships between gangs and status dogs; weapons; knives; acid throwing; drug supply and internalised gang dynamics. The driver for this was the publication of *The Street Casino: Survival in the Street Gang* (2014) which drew on an extensive ethnographic study of local residents, professionals and gang members in South London and established a new theory of street gang behaviour based on generating street capital. Subsequent research has looked more deeply into drug supply and extended mobile phone based dealing networks known as County Lines.

His insights into the street gang world have led to engagement with both policy and practice at the highest level including the Home Office and Metropolitan Police Service; as well as police, probation, charities and local delivery in London boroughs. Alongside this has been extensive public broadcasting and conferencing as a way of transforming public debates. In March 2019, Professor Harding gave oral evidence to the influential Home Affairs Select Committee on how the UK can address serious violent crime. Questioned by the Chair, Yvette Cooper MP, he told the Select Committee that violent crime is increasing because more people are becoming involved with gangs, competition within and between gangs is growing, and social media was fuelling gang rivalries. When asked what more Government could do to address violent crime, Professor Harding argued that structures, policies and organisations were ‘culturally siloed, operationally slow, unresponsive, unmodernised, unadjusted, technologically ill-equipped, inefficient, underfunded and unsuitable’ and called for immediate action to stop good kids being pulled into doing bad things.
Professor Jonathon Loo and Dr Junaid Arshad are working to improve the security of the Internet of Things (IoT). IoT devices can be deployed to build smart infrastructure, such as smart cities and industrial IoT. The IoT is also widely seen as a new chapter of how technology becomes more common in our homes.

As governments in the UK and elsewhere have recognized, when we trust an increasing amount of personal data to online devices and services, the cyber security of these products becomes as important as the physical security of our homes. Their research is breaking new ground in IoT security, developing an innovative solution to improve the resilience of individual devices against cyber-attack.

Loo and Arshad, with competitively-won support from Innovate UK, have developed a new tool, CyMonD, which can protect these devices proactively and safeguard smart infrastructure. This initiative builds on wide-ranging Cybersecurity research and teaching programmes at the University of West London, helping to meet the huge demand for cyber security professionals, and keeping both industry and individuals at the leading edge of innovation.
The Faringdon Centre led by Professor Alani carries out research on the applications of non-destructive testing methods. Its research impacts in the fields of forestry, railway ballast and highway infrastructures. The Centre has developed novel approaches to map root patterns using innovative configurations of measurements and state of the art GPR systems. This has led inter alia to developing a robust detection framework for tree decay. The Centre has worked on applications at the Royal Botanic Gardens (Kew), the Tree Council, Ealing and Hounslow Councils, and the London Tree Officer Association. The team of researchers are presently monitoring ancient trees, including the oldest Lebanese Cedar in a West London Park, to establish its health status and define a coherent action plan for its sustainability.
Dehydration is a major problem among elderly people. It is associated with a range of adverse effects including urinary tract infection, confusion, constipation and falls and contributes to admissions to hospital. The I-Hydrate research team at the Richard Wells Research Centre (University of West London) have been investigating the problems of hydrating older people in two care homes in West London in a project funded by the NIHR NWL CLAHRC. They have worked with care home staff to design and test a range of practical strategies to improve the fluid intake of residents. By implementing these strategies the staff were able to sustain an increase in the daily fluid intake of residents to above the recommended minimum of 1500ml.

A resource pack for healthcare staff working in care homes, based on the work of the I-Hydrate project, has been published and is available online free of charge [www.uwl.ac.uk/i-hydrate](http://www.uwl.ac.uk/i-hydrate). The pack contains practical resources, tools and training videos to enable staff working in care homes to increase the choice of drinks and amount of fluid consumed by residents.

Sharing this resource pack is part of the UWL’s commitment to high-quality academic research which makes a difference to people and influences healthcare delivery. We believe it will enable other care homes to benefit from our learning and improve the quality of the hydration care they provide for their residents. The strategies in the pack will also be of use in other healthcare settings such as hospitals and people receiving care in their own homes.