Sharing the wonder

Our engagement with society
Successful engagement is about sharing. Here at Imperial College London, sharing the wonder means working together with people of all ages and backgrounds to share ideas, share discoveries, and share opportunities to get involved.

Is this new? In many ways, not at all. Since our foundation in 1907, Imperial’s mission has been to achieve enduring excellence in research and education in science, engineering, medicine and business for the benefit of society. In other words, engaging the public – and demonstrating this impact – has always defined our role in society.

But things are a little different today. In this brochure, you will discover how we are pushing engagement into new and exciting areas – supporting our people to deliver some incredible achievements.

Along the way, you will find a growing community of practitioners and brokers engaging with schools and inspiring young people. You will see the College making a positive impact as an anchor in our local communities. And you will hear about the patients we have consulted to improve understanding and healthcare – and how two-way discussions with the public have advanced our research.

Imperial’s strategic aim of sharing the wonder is backed by a major programme of work. This is led from the most senior level – and we are thrilled to have launched the President’s Awards for Excellence in Societal Engagement in 2016 to recognise and reward outstanding practice. The diversity of nominations received only confirms the phenomenal range of engagement work taking place across the College.

Just as society is constantly evolving, the College too continues to change – perhaps most visibly at our new campus in White City. We now have a once-in-a-generation opportunity to make a positive difference in a diverse and enterprising community, of which we are now an integral part. From The Invention Rooms, our brand new multi-purpose space, we will be running maker programmes to inspire local people’s creativity, hosting exhibitions, workshops and volunteering programmes, and seeking new ways to boost local employment.

Over the next few pages, you will discover some of our most exciting and promising initiatives. We are very proud of them all – but I know that we are only scratching the surface. Our wider ambition is to enable all of our people to engage with society in the ways that excite them most.

To do this, we need your support to make societal engagement a reality for everyone. Thank you for joining us on this journey.

Professor Maggie Dallman
Associate Provost (Academic Partnerships)
Imperial College London
Society – our essential research partner

Have you been to our Festival – or maybe one of our Fringe events? Through these we aim to create a dialogue about our research.

Good research cannot be done in isolation from society. Here at Imperial, we are continually seeking new opportunities to connect our research with fresh voices and experiences – and using these insights to help shape our research. Only through this culture of engagement can we truly share the wonder of science, and ensure that our work benefits society.

We believe that universities must be accountable to the public – and we put that belief into practice. Since 2012, for example, over 15,000 visitors have been inspired by, and involved in, our annual Festival and regular Fringe events, where we open our doors and host an exciting range of interactive experiences.

We are proud of our growing number of innovative public engagement activities – championed by passionate staff and students across the College. These include the Heart and Lung convenience store, run by the National Heart and Lung Institute. This pop-up shop transformed a disused retail unit in Hammersmith into a pioneering installation for two weeks in 2014 and 2015, enabling thousands of local shoppers to meet more than a hundred of our researchers, and to experiment with equipment simulating the heart and lungs.

Everyone can benefit from engagement activities like these: from our researchers and partners to members of the public. To make them work, we need to ask and listen – it’s always a two-way conversation. Today, we are thrilled that local schools, patients, community groups and the wider public are helping shape and contribute to our ongoing research.

Looking to the future, we are expanding support for our staff through new training opportunities, online resources to help source funding and new partnerships, and networks to provide advice.

We firmly believe that embedding public engagement within our work can increase the quality and value of our research, enrich our teaching, and increase our wider benefit to society.

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Thousands of staff, students, alumni, families and other members of the public descend on Imperial’s South Kensington campus every May for a hands-on experience of science at the Imperial Festival.

For two days our campus is transformed, as researchers take their work and equipment out of the lab and share their passion and excitement with others. From talks and workshops to behind-the-scenes tours of cutting-edge facilities, the Festival provides a unique opportunity for the College to open its doors and engage with our neighbours and the public.

Recent highlights include a futuristic Robot Zone, a Transport Zone with a recreation of London’s first motor show, comedy shows and dazzling music and art performances. Today, the Festival is at the centre of our growing culture of engagement with research across the College.

As an established event in our public engagement calendar, researchers are also using it to influence the path of their research and achieve a greater impact. The interactive Advanced Hackspace Sensorium is just one example of how the Festival has created a supportive, safe environment for innovative and experimental activities.

IMPERIAL FESTIVAL 2016 STATS

99% Visitors who said they would recommend the event to others
25% Visitors who had never been to Imperial before

The Imperial Festival attracts around 15,000 visitors each year
Have you visited the Wohl Reach Out Lab? Based at Imperial’s South Kensington Campus, this state-of-the-art schools laboratory has welcomed approximately 30,000 students and teachers to over 1,200 events in the last seven years.

Pioneered by Lord Robert Winston, academic champion for Outreach and Professor of Science and Society at Imperial, our ground-breaking learning hub is where a team of subject experts and young researchers from Imperial help deliver educational activities to raise the aspirations – and scientific literacy – of young people.

That valuable work takes place within the wider community too. We deliver outreach programmes directly to students and teachers in schools – with our community of staff and students running a number of initiatives designed to engage them in our cutting-edge research.

Innovative projects like the Wohl Reach Out Lab are just the latest in a long history of Imperial’s outreach work with schools and college students. We have always believed in raising the aspirations of all students, regardless of background, to fulfil their potential and apply to the right university for them.

Naturally, our focus is on STEMM (Science, Technology, Engineering, Maths and Medicine) learning and progression to higher education – including access to medicine and support for post-16 student choices. We work with schools and colleges, as well as parents, to change perceptions, support teaching staff and stimulate interest in STEMM subjects – all as part of Imperial’s widening participation and outreach agenda.

We also recognise the importance of early engagement. Today, Imperial is supporting primary school teachers across the UK to get students excited about science through a continuing professional development (CPD) resource. Launched in October 2014, Reach Out CPD is a web-based programme, which gives teachers resources and ideas to inspire primary school children with the wonder of science.

Looking ahead to 2016-17, Imperial will be opening a pioneering Reach Out Makerspace in The Invention Rooms at our new White City campus. A fully equipped, multi-purpose workshop, visitors can experience a year-round programme of educational outreach activities.

The focus will be on using ‘making’ as a vehicle to help young people to be more innovative, and to develop their vocational and technical skills.

Following the success of our cohort programmes for students in Year 10 and above, we are also starting a similar programme for students at Key Stage 3. Sutton Scholars with Coding will start in January 2017, working with students from selected London schools over three years to develop their coding and digital skills, with a STEMM focus.

This academic year, we are looking to expand our collaborations to include many more universities and organisations across both STEMM and the Arts. We will also be running focus groups with teachers to keep improving the opportunities we offer, such as CPD. Throughout this rich engagement journey, we are focused on building strong and lasting connections that will make a real difference to young people’s lives.

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Connecting with our communities

Have you heard? Our community partners are a wonderful source of inspiration and opportunities for collaboration.

Imperial has played an important role in the economic, social and cultural life of London for over 100 years. Our South Kensington Campus is built on the site of the Great Exhibition of 1851 and we are an integral part of the Exhibition Road cultural quarter of world-leading museums, academic and cultural institutions.

Our nine academic campuses, sports facilities and student halls of residence, spread across London and south east England, touch a wide range of local communities.

How do we make a positive impact in those areas? The answer lies in partnership.

Only by working together with local residents, businesses and partners can we ensure that our work truly benefits society.

At Imperial, we aim to unleash the local skills, talent and aspirations that will unlock opportunities for long-term growth, innovation and collaboration. It’s an ambitious vision – but we believe that the College can create opportunities for all by empowering local people, supporting local enterprise, and harnessing our full potential as an anchor institution in our local communities.

Community engagement around our new White City campus, in the London Borough of Hammersmith and Fulham, is a key area of focus for the College.

White City is a diverse and vibrant part of west London with a rich history and sense of community. Today, it’s experiencing rapid regeneration – but the area continues to have significant pockets of poverty, with some neighbourhoods ranked among the 10% most deprived in the UK. There is considerable local talent and entrepreneurial flair, but it is not always nurtured and supported. There are challenges in terms of education, health and lack of access to opportunities available elsewhere.

The College wants to make a difference to people’s lives in our neighbouring communities by supporting local education, health, enterprise, employment and through public engagement with research. We are forging relationships with local partners to build on existing community projects and develop new collaborations. For example, our series of interactive science pop-up stands – at the W12 Festival and at a QPR match day – have enabled hundreds of participants to engage with science in fun and hands-on ways.

Our future plans include the launch of The Invention Rooms as a dedicated community engagement hub focused on making. We are also looking to expand our portfolio of community volunteering projects by building on the success of Community Connections, an innovative programme run by Imperial College Union that places hundreds of students each year with over 150 community and charitable partner organisations.

These are ambitious plans, but the work won’t stop there. In fact, we are actively seeking new ideas and suggestions from local people to ensure we keep growing the impact we have within our communities.

The Invention Rooms contains three unique zones:

REACH OUT MAKERSPACE
A specially designed space for children and young people to gain hands-on experience of entrepreneurial thinking and prototyping.

ADVANCED HACKSPACE
Cutting-edge workshop facilities for students, staff and partners to work together in solving challenges and turning ideas into innovative inventions.

INTERACTION ZONE
A welcoming venue for public events, where local people and College partners can connect with science and Imperial’s research.

Our work at The Invention Rooms builds on a worldwide “maker movement” in which the College has played a pioneering role. We have already seen many exciting results. Successful student inventions from our Advanced Hackspace (boasting over 2,000 members and growing fast) include Lifebox, a low-cost baby incubator, and GyroGlove, a glove to dampen hand tremors for patients with Parkinson’s.

We are transforming an existing building into a hub for hands-on making and innovation. The Invention Rooms is Imperial’s newest platform for local community engagement – and the first project of its kind by any UK university.

Launched in 2017, this dynamic space in the heart of White City will give people of all backgrounds the opportunity to take part in creative and entrepreneurial programmes and hands-on making activities. Here, people can develop their creative ideas into real working prototypes.

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“We are really keen to continue collaborating with Imperial, after seeing the positive impact your science team had on our local community.”

Lucy Mullaly, W12 Festival Coordinator

Imperial hosted games, experiments and 3D printing demonstrations at the W12 festival.
Harnessing patient power

Patients as partners – find out more about how we engage patients to improve health and healthcare.

From participating in clinical research studies, to providing new perspectives on the way biomedical research is designed and delivered in the clinic, patients and their families have always supported our work to improve health and healthcare.

By sharing their time and experiences as part of our students’ and professionals’ training, patients and public volunteers are essential partners in improving education. In addition, Imperial involves patients and the public in our clinical research programmes to ensure that their voice is heard.

This can take many forms. For example, we have active patient groups in many of our research themes. ‘Lay advisors’ also sit on panels, helping shape the way we conduct research, and are sometimes directly involved in projects. For instance, in our research on patient safety, members of the public help collect data by conducting observations in hospital wards alongside researchers. Their involvement brings a unique perspective and quality to the research.

Patients also help us communicate with the wider public – from videos explaining their experience in clinical trials, to creating art installations, and regularly helping us produce materials for patients using the right tone and language.

Much of our work is led by the Imperial Patient Experience Research Centre. A multidisciplinary group of clinicians, public health specialists and social scientists – who combine strengths in qualitative and quantitative research methods – they are pioneering new ways of involving patients at our large Biomedical Research Centre (BRC). One of their notable achievements is an active Patient and Public Panel, who have run stalls at the Imperial Festival and helped organise a BRC Open Day to show the many ways in which patients can be involved in research.

Our academics have been at the forefront of engaging the public with advances in medicine. For example, Imperial’s Professor Roger Kneebone has been pioneering ways to bring surgery into the public domain for nearly a decade. His simulated operating theatre enables open communication about medicine and science with the public. This work enables us all to look at health and healthcare more holistically – bringing clinicians, scientists and members of the public together to share perspectives with one another.

Looking to the future, we plan to expand our Patient and Public Panel with hundreds of volunteers from our diverse local population, who can be partners in our work. Through regular communication, we will build a close community, who can advise on our research and help shape events at Imperial, such as our Science Cafés.

We are also planning a range of exciting new activities to make this partnership flourish. For example, we will be working with colleagues across Europe to deliver a new training programme, where researchers, patients, designers, students and healthcare professionals can come together to learn how to co-create innovative solutions for health.

Patients, researchers, healthcare professionals and members of the public participated in our BRC open day, ‘Health Research Matters’.
OUR SUPPORTERS

Imperial would like to thank the many organisations and individuals whose support and advice have helped the College to shape and deliver our societal engagement activities:

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Native Scientist  
National Institute for Health Research  
Discover South Kensington  
Royal Albert Hall  
Royal College of Art  
Royal College of Music  
The Francis Crick Institute  
The Natural History Museum  
The Science Museum  
The Victoria and Albert Museum

Continue the journey

If you’d like to find out more about Imperial’s engagement with society, please visit: bit.ly/societal-engagement-16

If you’d like to get involved in supporting the College’s societal engagement work, please email: societal_engagement@imperial.ac.uk

Photography by Thomas Angus, John Cairns, Layton Thompson and Big Local