

Imperial College
London

Our strategy for engaging with society

2022–2023

SOCIETAL ENGAGEMENT AT IMPERIAL



As a university we are keen to make our work accessible, relevant, and responsive to the needs and insights of society. I am delighted to be sharing our latest strategy document, which lays out how we aim to achieve this.

As College Lead for Societal Engagement, it has been truly fantastic to see our students, staff and alumni taking great strides to evolve the way we work by starting new conversations, involving diverse voices and seeking fresh ideas.

Imperial's mission is to achieve enduring excellence in education and research in science, engineering, medicine and business for the benefit of society. Today we work with society more than ever before to fulfil this goal – engagement is happening across the College and in every academic department.

My team lead on a number of central initiatives, which can only be successful through collaboration with others across Imperial. As this strategy shows, we partner with school teachers and pupils, local community groups and residents, and patients, as well as the public more widely. This brochure outlines our motivations, audiences and objectives, providing examples of our flagship engagement initiatives and sharing the stories of our inspiring partners and participants. I thank everybody who gets involved in this work – from volunteers and mentors to researchers and external partners – without you, none of this would be possible.

We hope that this strategy inspires you afresh and provides an overview of the impact of our work as well as the great things that we aspire to achieve next. Please do get in touch if you would like to explore how you can get involved or collaborate with us to innovate, experiment and create change in exciting and meaningful ways.

Our doors are always open, and we are keen to be engaged.

Professor Maggie Dallman
Vice President (International)
Associate Provost (Academic Partnerships)
Imperial College London

What is engagement?

Societal engagement is about creating accessible and meaningful experiences and opportunities to exchange ideas, insights and skills. It is about inspiring and nurturing a sense of curiosity, whether with our own natural world or with the far corners of the universe. Through engagement we hope that we can bring tangible benefits to society, such as improved health through more relevant medical research, or cleaner fuels that reduce carbon emissions.

Why do we do it?

As a university focused on science and its impact in the world, we want to share our passions with other inquiring minds. And we want to make sure that we can be a trusted source of expertise in uncertain times. We engage because we want to be a responsible actor in society – globally and locally. It's about being a good neighbour and a good citizen. And it's about seeking not only to inspire people, but to collaborate, partner, share our passions and common challenges – and find solutions together.

What does that mean in practice?

We work in partnership with school teachers and pupils, local community groups and residents, patients and the public more widely – and we support our staff and students to do so too. It means involving and engaging members of the public in our research, through discussions and dialogue, festivals and data collection. It means widening participation in our academic programmes so that we are a diverse community that represents the society we are a part of. It means being an anchor within our local areas, providing the support that people need to improve their own skills and to engage with a scientific world. And, ultimately, it means trying to listen as much as we try to inform.

What have we achieved so far?

A huge amount of societal engagement takes place in all corners of Imperial. Here are some of the highlights from the work of our central teams:



60,000 public participants experience the Great Exhibition Road Festival activities annually, on average, with **92%** rating it good or excellent



300 young people annually participate in the Maker Challenge programmes



650+ attendees to six People's Research Café patient involvement events



1,000 researchers take part in our public engagement programme annually, on average



1,300+ family members take part in school holiday activities, and **60+** family members join term-long Saturday Science Clubs at the Invention Rooms



10,000 weekly views in English for Twig Science Reporter and **30,000** views in Spanish, on average



200+ staff and **200+** PhD students attend our societal engagement training annually, on average



41 community, public and patient engagement and involvement projects supported through six years of seed funding (2017–22)



334 sixth form and college students took part in the mA*ths and Further mA*ths Online Programmes in 2021–22




425 young people from 13 to 17 years old signed up to attend Summer Schools in 2022



3,000 science activity packs are created and distributed to local families each year

IMPERIAL'S SOCIETAL ENGAGEMENT STRATEGY

Vision



Empowering people through engagement with science, technology, engineering and maths (STEM)

See our outcomes table (p22–23) for the changes we aspire to make and how we will measure our progress

Motivations



To be engaging, inspiring and accessible to young people of all backgrounds

To foster scientific confidence, knowledge and understanding in society

To enrich our research and enhance our impact, by being more responsive to society

To build respectful collaborations that enable the public to be involved and valued in our work

To enrich our student, staff and alumni experience and enhance their skills development

Audiences



Primary and secondary schools, young people and their networks
Page 6

Everyone interested in or affected by our research
Page 9

Communities living and working near our campuses
Page 12

Patients, carers and their networks
Page 15

Our students, staff and alumni
Page 18

Working with underrepresented groups

Working locally, nationally and globally

Objectives



1
To support schools in their mission of raising pupils' ambitions and attainment in STEM

2
To increase diversity in our student body

3
To nurture a strong sense of social responsibility within our students

4
To be a trusted source of STEM expertise – locally, nationally and globally

5
To create innovative opportunities for more people to develop STEM skills and ideas

6
To embed public engagement in research projects and research culture at Imperial

7
To develop accessible and inspiring programmes and platforms that empower people in topical science issues

8
To develop the resources, infrastructure and governance to enable our staff and students to deliver effective public engagement

9
To foster an ethos of working in partnership with community and public groups to tackle shared societal challenges

SCHOOLS, YOUNG PEOPLE AND THEIR NETWORKS

Young people tell us that they face many challenges in understanding and accessing their options for progressing beyond school.

This is why our strategy for outreach and schools engagement is all about support and ambition. We want to engage with young people multiple times – our research and experience has shown us that this is the most effective way of empowering them to make informed decisions about their futures. We work with schools and young people across the UK, focusing on curriculum support and subject-based cohort programmes, to create a network of STEM enthusiasts who have the understanding, skills, networks and resources they need to succeed.

We have established Outreach Hubs in East Anglia and the West Midlands to further extend our reach, creating strong links with schools and pupils to provide critical curriculum support at GCSE and A-level.

We have partnered with a tech company to develop Reach Out CPD, an online primary science professional development programme for teachers, helping us to support pupils across the country right from an early age.

We use the pioneering Wohl Reach Out Lab at South Kensington as a hub to bring school pupils together with our passionate staff and students from Imperial, to get involved in hands-on experiments and engaging STEM activities.

In White City, the Dangoor Reach Out Makerspace similarly aims to inspire young people from the local community to think creatively and to see that there are no limits to using their entrepreneurial skills when they start making!

CASE STUDY



Dr Luke Delmas, *Senior Teaching Fellow (Department of Chemistry)*

“I started working on outreach programmes five years ago during my PhD, when I worked on the Spectroscopy in a Suitcase (SIAS) programme. I definitely caught the teaching bug! Since then, I have delivered lots of Chemistry workshops for outreach programmes and I am now a Teaching Fellow in the Department of Chemistry focused on practical chemistry education.

Taking part in outreach activities has enabled me to share some of the most exciting bits of practical chemistry with young people. It quickly became clear that schools have very different lab facilities, and therefore the pupils’ experience of lab work and instrumentation was incredibly varied. Being able to show young people things I didn’t see at school has been very rewarding, and I hope this has instilled them with excitement and wonder as they embark on their own chemistry journeys.

My experiences with Outreach have also supported my work, as they have helped influence how I design lab teaching for our undergraduate students. Understanding that our students come from a wide range of backgrounds means that when planning first year teaching, I seek to provide opportunities for everyone to practice and refine their experimental skills in a safe environment. This ensures we can work towards levelling the playing field in terms of creating a foundation of skills that will carry our students through their degree.

Being able to facilitate the growth and learning of young people has been really exciting. I love that they bring their own perspectives to the workshops, and sometimes ask questions that can catch you off-guard! This causes you to re-think your own practice or how we approach a topic. I have now seen several students who have subsequently enrolled at Imperial, and recently had a student tell me that their participation in outreach activities had a positive influence on their decision to study science at Imperial. Those are always really touching moments.”



PROGRAMMES AND PROGRESS

Pathways to Medicine

Pathways to Medicine is an intensive cohort programme focused on supporting young people on their journey to study Medicine. Developed and delivered in partnership with our Faculty of Medicine, it is supported by the Sutton Trust, a social mobility charity. It has been part of our portfolio of outreach activities since 2014.

Working with young people during their post-16 studies, it provides an in-depth insight into medicine as a career, alongside multiple activities that aid a successful application to medical school. These include a summer school, specialism taster workshops, admissions test support and work experience. During the pandemic, the programme moved to a digital delivery model. One of the standout successes was the digital work experience co-created with Professor Elizabeth Dick, Consultant Radiologist and Honorary Senior Lecturer at

St Mary’s Hospital. Participants experienced a patient journey through the NHS from a traumatic accident to rehabilitation, learning about the interdisciplinary nature of medical care.

The value of the programme doesn’t just come from the multitude of opportunities to experience medicine, but also from the valuable role that our Student Ambassadors provide. E-mentoring is a popular part of the programme, where each participant is matched with a current medical student on a secure online platform.

2022/23 sees the tenth cohort of participants enrolling on the programme, and around 540 young people have participated in Pathways to Medicine since its inception. More than 200 have subsequently applied to medical school.



Pathways to Medicine was an invaluable resource when applying to medical school. Without it, I feel that my journey would have been a lot harder

Sophie, a final year Imperial medical student



..... PROGRAMMES AND PROGRESS



173 primary school pupils attended term-long After School Clubs since 2018



6,500+ Year 12 and Year 13 students have enrolled on our A-level Maths and Further Maths MOOCs (massive open online courses). Cohorts of students from widening participation backgrounds receive additional masterclass events and online mentoring

Primary Science After School Club

The Primary Science After School Club is supported by Marianne Odjenfell and has been taking place since April 2018. The programme consists of ten sessions across a term, focused on hands-on experiential learning within themed topics.

Examples of topics and activities include:

- Microscopic World – identification of plant and insect parts using microscopy
- Crazy Colours – chromatography of inks
- Exploring Energy – making batteries and experimenting with circuits
- Defying Gravity – creating and testing parachutes for mini figures

The sessions were led in-school by Imperial postgraduate students and supported by school staff. Since 2018, 23 Imperial students have been engaged with the programme, running multiple sessions

per term. Eleven iterations of the Club took place pre-pandemic, with 125 primary school pupils having taken part. During the pandemic, restrictions meant our students could not deliver the Science Clubs in school and so content across a smaller number of topics was adapted to be delivered remotely. For each online science club, all equipment and consumables were couriered to the participating school and the postgraduate leader in advance, along with any tech that enabled participation (webcam, speakers etc). Our student leaders then delivered their session from home, beamed into the participating classroom. Modification of the programme has enabled five participating schools to engage since the start of the pandemic, benefitting a further 48 pupils in Years 5 and 6.

----- CASE STUDY -----

Elizabeth Morcom, *Science teacher*

"I have been working with the Outreach team for nearly ten years. I knew I wanted to be teacher, so I applied for the role of a student mentor in my first year. I thought it would be the perfect opportunity to gain experience, and it was! I have taken on so many distinct roles over the years, including providing both academic and social support on summer programmes, supporting activities as an Event Coordinator, and now that I am a teacher, creating and leading activities for programmes like STEM Potential.

I qualified as a chemistry teacher about five years ago, having completed the INSPIRE training programme with Imperial. I think my whole job is made easier by the experiences I have been part of with Outreach – some are obvious and some less so (such as Excel skills!), but I am constantly able to share techniques and learnings from outreach to schools.

I think participants on outreach programmes make invaluable connections with others. They benefit hugely from seeing that there are other students just like them, and that they are not unusual in enjoying STEM subjects. But they also make connections to the leaders, ambassadors



and all the staff as well. A student who was in my first ever programme when I was a mentor found me to say hello during their first week at Imperial, and another student who had met me on a summer school when she was in school is now a mentor herself. These connections after, as well as during activities, make working on these programmes so rewarding. Everyone who works in the team is so passionate about sharing their love of science and improving access to it. I love being part of that and I cannot wait to be a Residential Supervisor again!"

EVERYONE INTERESTED IN OR AFFECTED BY OUR RESEARCH

We believe that by working together, our research teams and members of the public can overcome challenges that affect us all, whether it's fighting disease or tackling climate change. It's vital that we enable public access to our research, and that a diverse range of people can get involved and influence it. While new research and ground-breaking innovations are exciting and inspiring to hear about, they can be further strengthened by an exchange of diverse ideas, experiences and questions.

In uncertain times, it's more important than ever that there are accessible sources of authentic information that people know they can trust. Beyond this, we should empower the public to engage critically with the information they encounter, building their confidence to do so. In an increasingly connected world, making sure that people can be part of a dialogue on topical issues is a must for our democracy. We aspire to facilitate inclusive discussions between voices from all backgrounds, because access to STEM is a key part of a fair and democratic society. That's where a university of science and technology that genuinely engages with the public can make a real difference.

We aim to connect with a broad range of audiences, from those already interested in our research and ready to get involved, through to those not yet confident in the sciences. Our engagement with new audiences often starts with providing enjoyable experiences that stimulate curiosity and build trust.

That's why we're creating a range of platforms and programmes to bring together the public and our College community in a way that is appropriate to participants' confidence levels and needs. Programmes such as our annual Great Exhibition Road Festival, for people of all ages to enjoy creative workshops, talks and discussion events, citizen science activities, music and more. We also run our Imperial Lates events, in which around 15 research groups per event debate, workshop and explore areas of their work with adult audiences, and our hands-on family activities and science clubs at the Invention Rooms exploring themes such as robots, chemistry and making.

It's also why we're supporting our research teams in developing, delivering and evaluating their own engagement activities to maximise the impacts they have in society.

----- CASE STUDY -----



Carmel Howe, *Postdoctoral Research Associate, Bioengineering*

"I did some outreach activities during my PhD, so I was excited to take part in the Great Exhibition Road Festival. The Public Engagement team paired us with artists to create a hands-on workshop to inspire attendees about our neuroscience research. Having artists as friends, I'm always astounded at the outreach they do – I've struggled to come up with anything so engaging myself.

The Festival was a great experience of managing an outreach activity and working collaboratively with people from outside science. It felt like a joint project, and we came up with an idea we wouldn't have thought of on our own, which gave us a great platform to explain our research.

The workshop was very popular. At times the sheer number of attendees was overwhelming, but I think that's a testament to how well designed it was. The children were obviously very excited, but the parents too were asking lots of questions. I even met a schoolteacher, and we now are setting up a lab visit for one of their students.

We learnt lots about new approaches to engagement and how we could make it better next time and give the science a bigger presence. For one of my colleagues, it was the first time he'd been involved in public engagement. He was a bit shy initially but by the end of the weekend, he was keen to do it again, which was useful when we used it at a 'Take Your Child to Work' day.

I am still in contact with the artists, and we've discussed applying for outreach grants to develop new workshops and activities to take to schools or other festivals."



94% of festival visitors would come again

PROGRAMMES AND PROGRESS

Great Exhibition Road Festival

The Imperial-led Great Exhibition Road Festival is our flagship public engagement initiative, with a major live festival weekend every summer on Exhibition Road, South Kensington, supported by year-round community and school outreach activities and regular digital events.

This celebration of the sciences and arts launched in 2019, as South Kensington saw over 60,000 visitors attend across the weekend. Exhibition Road is closed to traffic for the duration of the festival to make way for many local institutions – including the V&A, Royal Albert Hall, Natural History Museum and Science Museum – to collaborate and create a free programme of unique and creative workshops, talks, exhibitions and performances for all ages.

Local community engagement is a key objective for the festival partnership and as such, we lead programmes for schools and community groups. Our Young Producers programme enables local young people to develop new production skills, whilst also helping to ensure our future festivals are welcoming and engaging to more local young people. Our family activity packs provide hands-on activities for hundreds of local families, whilst our Great Exhibition Squared project connects local school pupils with researchers who help them design inventions to solve real-world issues.

The Festival also hosts online events called Explore at Home, which launched during the pandemic and continues to provide fun and thought-provoking activities for families and adults.



CASE STUDY

Charlotte Kestner, Admissions Tutor, Mathematics

“My role includes championing outreach and engagement wherever possible. This is important to me as I would like to see a more diverse and inclusive cohort and I think outreach is one of the best ways to encourage students to think about doing a maths degree.

The Public Engagement team approached me and a few colleagues with the idea of a maths-themed event as part of their Imperial Lates programme, which are after-hours public celebrations of science and engineering. At first, we thought they meant contributing a single stand to a larger event, not pulling together a whole evening dedicated to maths! I think a few of us were quite sceptical that we would get enough staff from the department involved, or have enough activities.

However, I was amazed at how popular the event was, both in terms of the number of academics who took the time to come up with demos and talks, and how many members of the public we reached. I think everyone really enjoyed it, and it’s probably fair to say it was the biggest maths-only event most of our staff had ever been involved in. It certainly was for me.



Personally, I had lots of fun developing my own workshop making platonic solid chocolate truffles, which seemed to be very popular with the public. I was also pleased that the Lates gave many of our staff their first experience of outreach. I think it has given the department more confidence that it can deliver large outreach events in future.”



1,500 visitors attended our two in-person Lates events in the 2021–22 series, more than half of whom had no connection to Imperial

PROGRAMMES AND PROGRESS

Imperial Lates

Imperial Lates is a regular programme of sociable and inspiring evening events, providing a fun way for London-based adult audiences to connect with Imperial’s latest research.

Each event is centred around a topical and relevant theme, which is explored through talks, creative workshops, tours, games and more. Visitors can grab a drink and enjoy music while also getting the chance to meet scientists and researchers who are shaping the future in their field.

Catalysed by the pandemic, the team redesigned the Lates as a series of digital engagement events. Over 40 digital events were delivered over this period, ranging from an insect-inspired yoga class and a cardiology Valentine’s workshop to expert panel discussions on the future of work and what to eat to save the planet.

Over 3,000 households tuned in to the live online events with thousands of people watching post-event recordings and tens of thousands getting their burning science questions answered through a series of Reddit AMA events.

Imperial Lates returned to South Kensington in 2022 with Imperial Lates: The Brain, exploring everything from gambling disorders to psychedelic drugs and why our brain operates in the way that it does in various scenarios. The event gathered 1,600 pre-event registrations and over 800 on-the-night attendees, providing researchers across neuroscience, neuroengineering, mental health research and brain sciences with a unique opportunity to directly engage with many diverse Londoners.

COMMUNITIES LIVING AND WORKING NEAR OUR CAMPUSES

We believe that the best way to find solutions to society's challenges – from educational inequalities to climate change – is by working in collaboration. We're therefore extremely proud of our connections with underserved communities in London, where we are working in partnership with residents and organisations to make a positive social impact.

We aim to be a responsive civic institution that supports local communities. And, as a science-focused university, we are passionate about making our science and technology accessible to all by listening and learning, and by working collaboratively to develop confidence, connections and skills.

Our holistic approach has developed in response to local needs and in line with our strengths as a university. Over the past five years, we have formed a dedicated team and established a pioneering community innovation space called The Invention Rooms. Our aim is to be a long-term friend and partner in our local communities.

..... PROGRAMMES AND PROGRESS

Our work in White City

A particular local focus is White City, where we are building a major new campus. It's a diverse part of London, with a rich history and strong sense of community, but it is also affected by longstanding social, economic and health inequalities with barriers to accessing opportunities, especially for young people.

By listening to the local community, learning about local challenges and forming trusting relationships based on understanding and mutual respect, we can equip local people with skills of the future, and increase social connectedness, confidence and wellbeing.

For some members of the community, it can take time to build trusting relationships and encourage the belief that engagement with a university is for them. Because of this, we offer a range of opportunities and activities, from 'light touch' events that might start a person's engagement journey to higher intensity programmes that have greater long-term impact.

----- CASE STUDY -----

Carol Fraser, local entrepreneur and Agent of Change



I'm a vegan nutritionist and recently appointed Head Chef who enjoys growing organic food and running workshops around London and my local community that support people who are transitioning towards a healthier lifestyle. I have developed a natural skincare range which I am about to launch globally online. The Agents of Change programme has given me the confidence to go ahead and branch out in this area.

I decided to move into holistic care after my daughter suffered mental health problems as a result of being bullied at school. I went from working in a really dynamic environment to becoming someone who supported my family and I lost sight of who I was and started to doubt my abilities. I joined the Agents of Change programme to further develop my skills, regain my confidence and think of myself differently. I also wanted to build up my knowledge and skills to be able to mentor other women in the local area, but at the same time to learn from women with more experience than me. It's been an amazing journey so far.

For a very long time, I'd lost my joy. I became something to others and nothing was left for myself. I'd been searching for that kind of joy – to have that balance back in my life. The programme has taught me how to manage myself emotionally to see where I needed help. I now keep a gratitude journal and am keeping track of my goals and setting timelines. I was very low and the programme has really helped me to find myself again. I'm so much happier because I can see how I'm going to achieve my goals. It's the greatest thing. I now have a beautiful support network of local women.



..... PROGRAMMES AND PROGRESS

Agents of Change

Agents of Change is a pioneering place-based community leadership network for women who have an active interest in driving social change in the north of Hammersmith and Fulham. It was established in 2018 by a group of local partners, including Imperial College London, Hammersmith United Charities, the Lyric Theatre Hammersmith, and the London Borough of Hammersmith and Fulham.

The aim of the network is to support, empower and connect female community leaders of all ages, sectors and backgrounds to drive positive social change. It brings together grassroots community leaders, local businesses

and organisations who want to make a difference.

Network meetings take place several times a year, featuring different guest speakers and creative networking activities. Members of the network can apply to join the Women's Community Leadership Programme, a free six-month leadership programme, accredited by Imperial, aimed at building the skills of female community leaders operating in the third sector.

Agents of Change is unique as a locally based women's leadership initiative in the UK, and we're proud to be a key partner in bringing the programme and network to life.



PROGRAMMES AND PROGRESS

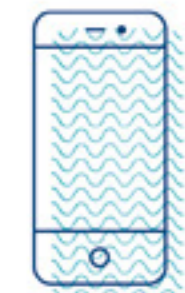


The Maker Challenge programme at the Makerspace saw a total of 471 participants (14–18 year olds) and 25 cohorts.



The pupils that we have had on the Makerspace course repeatedly came back to me buzzing about the experiences they have had

Teacher, Hammersmith Academy



The What the Tech?! programme has supported more than 100 local residents since it started

Family programmes

Our Public Engagement Programme connects local families with Imperial researchers around science activities.

The programme aims to bring science to life for families by enabling them to take part in creative, challenging yet playful workshops, delivered by facilitators and researchers. All sessions are free as we aim to connect with the diverse families in White City, many of whom are underrepresented in STEM. As a family programme, we want to engage adults and children to encourage families to talk about science and do it together.

Throughout the year we deliver school holiday workshops for families, reaching over 1,300 people annually. Sessions range from art and science, such as making bath bombs and creating artistic prints to exploring how science makes us feel, as well as engineering, coding, and experimenting. The workshops are often co-delivered by researchers to offer an

opportunity for local families to meet and speak to working scientists.

To develop more sustained engagement with families, we created the Saturday Science Club, a programme that deepens engagement through a series of workshops over the term. Sessions reflect the real-life skills that scientists need to use in their careers whilst teaching children what science can be for them. For parents, the Saturday Science Club helps their confidence with science and highlights Imperial’s research as relevant to their everyday lives.

Prompted by the pandemic, we have since developed over 4,000 science activity packs. The packs contain a series of activities developed with researchers, designed to enable families to do hands-on science at home.

CASE STUDY

SONDER, Young Producers project for the Great Exhibition Road Festival



As part of the festival each year, Imperial recruits a group of local young people that are aspiring to become event producers of the future. In 2022, these Young Producers created a new visitor experience that fused science and the arts. They brought an array of backgrounds which helped us to embed local young voices and social values into the festival and ensure fresh and diverse experiences that inspire festival visitors.

In partnership with our Festival Team, the Young Producers collaborated with local creative leaders, artists and Imperial researchers to produce SONDER. The name

comes from the definition of the noun sonder, the realisation that each random passer-by is living a life as vivid and complex as your own.

They worked with lens-based artist Nathaniel Telemaque and Imperial’s Dr Simon Foster to develop this exhibition and experiential event. Using Dr Foster’s research and understanding about the sun, the group aimed to inspire the feelings of nostalgia of the ideal summer, encouraging participants to draw on their own personal experiences through visual and audio displays.

PATIENTS, CARERS AND THEIR NETWORKS

Imperial’s medical researchers have an ambitious goal: to improve healthcare for patients across the world. But the work we do can only go so far without involving patients, carers and the public, to improve it with their lived experiences and insights. That’s why they are vital partners in what we do.

There are many opportunities for patients and the public to play a part in medical research at Imperial – from coming up with research ideas, to helping us train researchers about the benefit of involving patients, being public co-applicants on research studies, involved in groups advising a research project, interpreting research findings from a patient perspective, and communicating to others about research. Patients and the public can help shape all types of research, whether it’s developing medical devices for diagnosis, redesigning a clinical area for better patient experience, or improving innovative therapies and treatments. We are so grateful to everyone that has been involved so far – people around the world could be receiving better care because of their input.

We are always looking to involve more people. We run events such as our People’s Research Cafés to facilitate discussions around health and medicine. We share opportunities online through the VOICE platform, newsletters to our mailing list, and Young People’s Advisory Network (17 to 25 years). We support researchers to embed public involvement within their own projects through the training and resources implemented and developed by the Patient Experience Research Centre, a core facility of the National Institute for Health Research (NIHR), Imperial Biomedical Research Centre. Through involvement and engagement, patients, carers and their networks can make an impact on research at Imperial, learn something and meet people along the way.

CASE STUDY

Dr Helen Skirrow, National Institute Health Research Clinical Doctoral Research Fellow, Child Health Unit, Department of Primary Care and Public Health, School of Public Health



“Why has nobody asked us?” aims to explore families’ experiences and perspectives of childhood vaccinations and is a co-production research project between Dr Helen Skirrow and The Mosaic Community Trust (Mosaic). In the UK,

children living in poorer areas of big cities like London who belong to ethnic minorities or who do not speak English at home are less likely to be vaccinated, however in previous research the voices of these families have often been missing. By undertaking a co-produced public involvement research project, this project hopes to address this gap in the research and help vaccine services improve so more children get vaccinated.

Helen and Mosaic’s relationship began in 2018 after she met their CEO Lena Chaudary-Salter at a workshop run by the Patient Experience Research Centre. The two went on to work together to understand and improve pregnancy vaccine uptake as part of the MatImms research team led by Professor Beate Kampmann. Helen and Beate went on to become advisors to Mosaic.

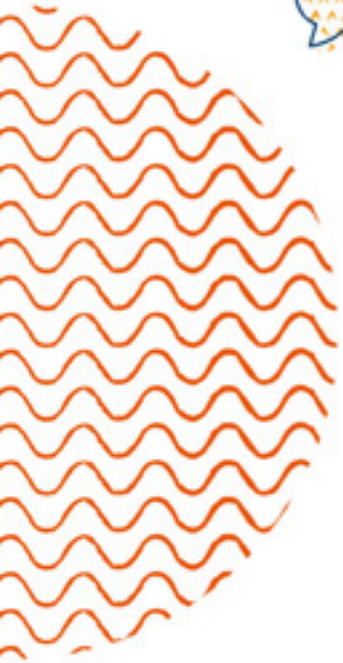
The project’s co-created research protocol includes data collection via a co-created questionnaire which will be used to understand childhood vaccination access and attitudes of local families about this access. Mosaic community health advocates will be acting as co-researchers to deliver the questionnaire which will be available both online and in print and will be translated by community health advocates for those who do not understand English. The project is following the NIHR’s five principles for co-production: sharing of power, including all perspectives and skills, respecting and valuing the knowledge of all those working together on the research, reciprocity, and building and maintaining relationships.





The study has further cemented my belief that collaboration between the public and researchers are needed to create the best result

REACT public advisory group member'



PROGRAMMES AND PROGRESS

VOICE

VOICE is an online platform that allows Imperial researchers to post opportunities for public involvement and engagement in research which includes patients and carers, connect with new communities and build ongoing relationships. We believe that the public should have a say in health research that may ultimately affect their lives, and value the insight that only lived experiences and public perspectives can bring.

We know that there can be barriers to public involvement, and while it's extremely important and valuable, it can be hard to do well when time and resources are limited. Through VOICE we hope to make it easier for researchers to engage diverse audiences. We want VOICE members' lived experiences and perspectives to improve our research at all its stages. We hope that the platform will both encourage new researchers to involve the public in what they do and inspire more diverse audiences within the public to become involved in our work.

VOICE enables researchers to:

- Access a large and diverse community, that can be quickly and easily involved in their research
- Use flexible methods of involvement, from polls and surveys to discussion forums and groups
- Gain insight from the general public, as well as patients and carers with condition-specific experience
- Strengthen funding applications with VOICE's innovative digital approaches that complement traditional public involvement methods

By contributing their experience, ideas, insights and vision, VOICE members become partners in research, and we are excited to see what it makes possible.

Find out more and sign up as a member at www.voice-global.org



CASE STUDY

Real-time Assessment of Community Transmission (REACT) Project, Patient Experience Research Centre Project Team (Faculty of Medicine, Imperial College London)

As part of the REACT programme at Imperial College London, an ongoing study of at-home COVID-19 antibody testing was undertaken to estimate how many people in England had already had COVID-19. Understanding the public's views of 'usability' (i.e. how easy it would be to perform an antibody correctly) and 'acceptability' (i.e. how willing people would be to perform an antibody test) was critical to ensure that this programme ran successfully.

To obtain feedback on the proposed study, the team invited members of the public (including adults and young people, from diverse backgrounds and geographies) to join a series of Zoom calls to talk about antibody testing. The session gave the public the chance to hear more about what at-home COVID-19 antibody testing would involve, ask any questions and raise any key concerns or suggestions for the project.

The discussion with the public was extremely valuable, and highlighted that overall, the public viewed at-home antibody

testing as appropriate and acceptable. Several suggestions to improve the comprehensibility of the instructions on how to take the antibody test were also provided by those involved. Input from the discussion was used to develop a set of frequently asked questions on our website to improve communication about the study and the test, including the purpose of the testing and how it works.

We developed insight reports and infographics which have been shared with individuals at the Department of Health and Social Care, Ipsos MORI, and Imperial College London who are involved in ongoing planning and management of the antibody testing programme.

The team have continued to involve and engage the public across the REACT programme including establishing a Public Advisory Group formed of eight members of the public who continued to review and feedback on our study plans, results, and material and made an incredible impact on the research programme.



PROGRAMMES AND PROGRESS

People's Research Café

Since 2018, we have been hosting the People's Research Café, which is a hybrid between a science café and a more typical public involvement in research workshop. It is co-delivered with other Imperial research centres in partnership with patients and members of the public.

The aim of the People's Research Café is simple: to give the public a flavour of public involvement in research by giving them the chance to contribute to real-life research projects in a community café type setting. As well as getting fresh public input into projects, we wanted to take research into communities, build relationships and have some fun.

We set up a welcoming environment so that people feel able to discuss research openly. Cafés have a degree of universality,

meaning that the concept can be applied across different sites and audiences. The café is co-developed and co-facilitated by both researchers and public/community partners, who assist to make the café more accessible, informal and to reduce any power imbalance.

Researchers provide a summary of their projects and three key questions on which they would like input to get the conversation started. Café visitors join a table of their choice to discuss a research project from the 'menu' and share their insights – over a coffee or tea, of course! Coffee jars are filled with thoughts and suggestions, providing input on everything across the research cycle, from study design to implementation. Based on the comments they receive, the researchers involved make changes to their projects.



100% of researchers who gave feedback would recommend getting involved



650 people have visited the six café sessions we have run so far, including in White City and Westminster community centres and at the Great Exhibition Road Festival in 2022, which involved members of the community in planning and running the event. With all the new ideas and insights they received, 100% of the researchers who fed back after the community cafés said they would recommend getting involved in the People's Research Café to their colleagues.

OUR STUDENTS, STAFF AND ALUMNI

Engagement is part of the culture at Imperial, and our Societal Engagement team are here to support our people to develop their engagement practice, share their passion, tap into new funding streams and collaborate with others from within and outside Imperial. We want to make it easier to make engagement a reality for everyone at Imperial.

That's why we deliver programmes for people to develop and deepen engagement skills, and to keep raising the quality of our public engagement. Our staff training and support ranges from online resources and a set of engagement masterclasses to our annual Engagement Day and our accredited Engagement Academy. Undergraduate students can attend our accredited public engagement course via Horizons, and postgraduates have a variety of courses via our collaboration with the Graduate School. We run awards and seed funds, coordinate networks, and are always on hand to provide engagement advice to staff and students.

We work with our wider Imperial community to develop, embed and guide our societal engagement strategy. Our groups and networks – including the Societal Engagement Champions network and the Engagement Practitioners network – facilitate a dialogue with staff in academic departments. By working in an open and connected way, we ensure that centrally based programmes meet the needs, concerns and interests of those working across the whole College.

Finally, we use thoughtful and robust evaluation to monitor the effectiveness of our initiatives, identify ways to improve and understand the impacts of our work. You can see the changes we hope to make and the ways we measure them in our Outcomes Table (see page 22). Through a reflective approach we can understand and demonstrate the progress we are making in empowering people through engagement with science, technology, engineering and maths.

PROGRAMMES AND PROGRESS



Engagement Academy

The Engagement Academy is our most in-depth training provision for staff. It's our innovative eight-day course which takes place over six months, and involves seminars, practical workshops and panel discussions. The programme is delivered in collaboration between Imperial's Public Engagement Team and Science Communication Unit.

The Academy focuses on discussion and building community, and supports individuals to develop their identities as public engagement practitioners, as well as to grow their skills, ideas and confidence. It is also an important way for us to listen to our colleagues across the Institution. Sessions cover themes from the role of science within culture, to inclusivity and diversity in science, writing and news media, exhibition creation, podcasting, and evaluation. As a group we visit other engagement spaces, hear from internal and external experts, and workshop ideas.

An average of 16 members of staff graduate from the Academy each year, including researchers, teaching fellows, centre managers, research technicians and coordinators from a range of departments. Participants are supported to work on an engagement project of their own between the sessions. It has been rewarding to see these ideas come to life – whether a schools workshop, a festival activity, a competition, game, online videos or comedy set. We continue to be inspired by what participants come up with and look forward to meeting the next cohort!



16 members of staff graduate from our Engagement Academy on average each year

Case Study

Anandha Gopalan, *Principal Teaching Fellow, Computing*

"It is humbling to have won a President's Awards for Excellence in Societal Engagement – there are some amazing people on the list of winners and I feel this level of recognition at the College is truly special to be part of."

Public engagement is very important to me – I see it as just a small way to give back to the community. As scientists, it is a moral duty to explain our research and involve the public since most of our research is publicly funded. This is especially important in the current times when there seems to be an increasing distrust of 'experts', and perceptions of scientists in their 'ivory towers'.

I run computing activities with many community organisations and schools. One of my projects is Discover Computing, which was designed to give students and families from under-represented minorities an insight into computing to pique their interest towards pursuing it for their studies. The sessions were very well attended – we couldn't actually fit

everyone in who wanted to take part – so we are planning more for the new year. The Outreach team provided some seed funding for this, which has been extremely helpful.

I've been involved in engagement for a long time but over the last year or so we've had some real successes – running these workshops being one of them! Working with Jackie Bell, our Senior Teaching Fellow for Public Engagement, and Ben Glocker, our academic champion for public engagement, we are hoping to get more staff and students involved. I've given talks about what I do, including at the School Governors' Network lunch, and have had some great discussions with colleagues.

I also took part in the Engagement Academy, which was an excellent experience. It helped me flesh out my ideas and think along different lines. It also helped me think of other potential activities in the future. Most importantly, it showed me there is a big community in the College and put me in touch with others as passionate about this as I am!"



..... PROGRAMMES AND PROGRESS

Societal Engagement Seed Fund

We enable staff to get their ideas off the ground through our annual seed fund. Each year we support multiple projects in diverse areas of societal engagement up to £2,500 each. We introduced this scheme to help more staff to participate in societal engagement, to enhance the diversity of activities taking place, to spark new ideas and collaborations, and to broaden the reach of our engagement to new public, community, school and patient groups.

The fund has supported a range of projects, from science activities in supermarkets, to drama workshops with young people living with HIV, animations about tuberculosis, arts engagement with street children in Tanzania, and a multisensory journey into the universe. Project leads told us that they

learned new engagement skills, gained inspiration, developed partnerships, better understood practicalities, changed their attitudes and perceptions, and became aware of new possibilities for funding. Not to forget having a lot of fun!

The Societal Engagement seed fund has supported 41 projects so far. We also run other seed fund schemes: one with a focus on community engagement, inviting proposals from local residents and organisations, and another on patient involvement to support researchers in healthcare. These schemes are a rich source of inspiration, ideas and innovation, with new and surprising projects emerging each round.

----- CASE STUDY -----

Ishita Marwah, PhD student, National Heart and Lung Institute



“Academia exists within and for the benefit of society, and the general public are therefore crucial stakeholders in the scientific process. I think engaging with the public helps us scientists understand this better, helps our work to meet societal expectations and needs, and helps the public feel more involved and aware of science. So it is a win-win situation for all!

I was awarded Societal Engagement Seed Funding for my project, Translating TB, where we created animations about latent TB and the importance of testing. Our film has now been translated into eight languages and is displayed in GP waiting rooms across London. I think I underestimated what a lot of work it would be when I first took it on! Once I’d readjusted my focus and expectations, I really enjoyed the process of interacting with people I never would have met otherwise. Experiencing how people from ten different

parts of the world connected over health, well-being and science was very rewarding. I also learnt that the traditional definition of hard-to-reach communities might be more about how our approach to things makes it hard for us to reach them, and not the attitudes of the communities themselves who are often eager to reach out.

I was then awarded a President’s Award for Excellence in Societal Engagement. I suddenly saw my picture on the screen and the next thing I knew, I was with Alice Gast and she was looking for a photographer! I felt very happy, very appreciated, and so pleased that Imperial is giving societal engagement the recognition it deserves.

I’ll definitely be doing more public engagement – I’d like to build on collaborations I’ve established and apply for more funding. With support from our lovely Public Engagement team, I did make it to the final interview stages for the prestigious Wellcome Engagement Fellowship Scheme earlier this year.

As a result of my public engagement, I’ve become a more aware person and a more conscientious scientist. I’ve also made friends and connections that will last the rest of my life. So, it has influenced not only my work, but my life.”



MEASURING PROGRESS AGAINST OUR STRATEGY

Objective	What changes are we making? Key outcomes	How are we measuring this? Example impact measures
1 To support schools in their mission of raising pupils' ambition and attainment in STEM	<ul style="list-style-type: none"> Improved teacher confidence in STEM, especially at primary schools. Positive outcomes for participating pupils around increased attainment, ambition and awareness of STEM subjects and careers. Parents and carers become more familiar with decision-making around subject choices and careers. 	<ul style="list-style-type: none"> Instances of parent and pupil participation (e.g. accessing resources or attending sessions). Feedback from participating teachers shows increased confidence and positive influences on classroom practice. Feedback from participating pupils and parents shows positive outcomes including about pupil ambitions and awareness. Follow-up data around pupil attainment (e.g. exam results). Monitor teacher engagement with our Twig CPD programme.
2 To increase diversity in our student body	<ul style="list-style-type: none"> Higher number of students from disadvantaged and underrepresented communities engaging with and accessing Imperial. Greater national diversity in student body (e.g. from White City communities and across the UK). Greater international diversity in student body (e.g. from a wider range of countries). 	<ul style="list-style-type: none"> Information about school pupils participating in outreach activities and visits. Information about school pupils applying to Imperial and entry rates. Number of enrolments at Imperial from disadvantaged and underrepresented communities. Levels of awareness and perceptions of studying at Imperial within target audiences.
3 To nurture a strong sense of social responsibility within our students	<p>Current and graduating students:</p> <ul style="list-style-type: none"> show awareness of the evolving relationship between science and society understand the role of universities and research in tackling societal challenges value public engagement within their field of study and are motivated to get involved appreciate that societal engagement can help them to understand different perspectives, experiences and inequalities. 	<ul style="list-style-type: none"> Student feedback from societal engagement training (e.g. Graduate School courses). Feedback from students participating in Outreach programmes (e.g. STEM activity leaders in Reach Out Lab and Makerspace). Feedback from students participating in our public programme and/or practical training (e.g. volunteering at the Festival and Lates).
4 To be a trusted source of STEM expertise – locally, nationally and globally	<ul style="list-style-type: none"> Varied and successful collaborations locally, nationally and internationally. Public visitors, school teachers, community members and patients see Imperial as approachable, inclusive and trustworthy, and its work as relevant and evidence-based. Imperial has a positive public media profile. Our societal engagement work is shared and recognised by our funders and peers. 	<ul style="list-style-type: none"> Effective partnerships developed with positive feedback from collaborators (e.g. the Festival partners and community projects in White City). Public visitors (e.g. to the Festival and Lates) experience informative and inspiring interactions with staff and students. Recognition from funders and peers (e.g. successful grants, receiving awards, positive communications and publications, and new invitations to partner).
5 To create innovative opportunities for more people to develop STEM skills and ideas	<ul style="list-style-type: none"> Increased confidence in STEM amongst public participants, including from local communities. Increased skills in developing ideas, physical and digital making, amongst public participants, including from local communities. Participants in our technical or making programmes explore other qualifications or awards, or access further education, apprenticeships or employment. 	<ul style="list-style-type: none"> Participation data for technical and making programmes, such as numbers attending sessions and accessing online resources. Participants in making and technical programmes (e.g. Maker Challenge) feedback increased confidence. Feedback from participants indicates progression or the intention to do so (e.g. pursuing qualifications or training, apprenticeships or use of facilities).

Objective	What changes are we making? Key outcomes	How are we measuring this? Example impact measures
6 To embed public engagement in research projects and research culture at Imperial	<p>Staff and students:</p> <ul style="list-style-type: none"> engage relevant public stakeholders as early as possible in research design value the importance of engagement to their field of work take part in genuine two-way engagement where possible and have a positive experience report impacts of engagement on their research or work, including new perspectives, directions and collaborations feel that the culture at Imperial is supportive of and conducive to participation in societal engagement. 	<ul style="list-style-type: none"> Proposals for research projects and funding include meaningful public engagement and/or patient involvement, and plans receive positive feedback from funders. Societal engagement is embedded within departmental strategies, roles and support, and reward and recognition structures value engagement (e.g. promotions, personal development reviews). Feedback demonstrates longer-term impacts of engagement activities (e.g. through evaluation of the Festival, awards and Societal Engagement seed fund). Staff survey on Societal Engagement reports impacts of engagement work and positive attitudes towards engagement, including support from Department and College.
7 To develop accessible and inspiring programmes and platforms that empower people in topical science issues	<p>An increasingly diverse audience participate in our public programmes and research.</p> <p>Public, staff and student participants:</p> <ul style="list-style-type: none"> have a positive and empowering experience and are motivated to participate in other events feel that they have had the opportunity to contribute to conversations about issues that matter to them have lasting positive outcomes (e.g. increased interest in STEM, new skills, understanding of the scientific process, awareness of Imperial's research). 	<ul style="list-style-type: none"> Information about participants (e.g. numbers attending, age, gender, level of previous education) in programmes (e.g. Festival, White City events, Peoples' Research Cafés). Feedback (from public and staff/student contributors) about the programme including about the experience itself and resulting outcomes (e.g. evaluation of Festival, Lates and Young Producers Panel). Numbers and feedback from those involved in committees and advisory groups (e.g. Young People's Advisory Network for health research). Utilisation of VOICE online platform by members of the public and Imperial researchers to share and access engagement and involvement opportunities (e.g. user figures and online engagement).
8 To develop the resources, infrastructure and governance to enable our staff and students to deliver effective public engagement	<p>Staff and students:</p> <ul style="list-style-type: none"> feel equipped and motivated to get involved in engagement activities hold positive attitudes towards engagement (e.g. value the importance of engagement to their field of research/study, and as an opportunity to gain insight from a diverse range of views) feel supported to carry out engagement as part of their work through the provision of support, resources and training. 	<ul style="list-style-type: none"> Numbers and diversity of staff/students accessing capacity building sessions and resources (e.g. attending training, downloads of resources and applications to seed funding). Numbers and diversity of staff/students involved in public programmes. Feedback from those attending courses/using resources – including whether course met needs and expectations, and positive outcomes on understanding, confidence and skills. Levels of staff/student engagement activity and attitudes across the college (e.g. as measured through the Societal Engagement staff survey, reports of departmental engagement activity).
9 To foster an ethos of working in partnership with community and public groups to tackle shared societal challenges	<ul style="list-style-type: none"> Staff and students seek out relevant and appropriate community and public collaborators for their engagement work and see the value in working in partnership. Programmes are enhanced by the involvement of community and public groups (e.g. in the development of activities). Community and public groups have a positive and empowering experience through partnering with our staff and students (e.g. in the development of new skills, understanding and connections). Partnerships are meaningful and sustained for both Imperial and public/community groups. 	<ul style="list-style-type: none"> Information including the numbers, diversity and nature of partnerships in engagement activities across the College (e.g. through departmental champions). Feedback from collaborators with whom we run programmes (e.g. the Festival, White City projects and Peoples' Research Cafés). Programmes created through partnerships from the outset (including the involvement of teachers in Outreach programmes, and community partners in White City), as evidenced in funding proposals, advisory group membership and programme delivery.



THANK YOU TO OUR SUPPORTERS

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

- Mr Humphrey W Battcock
- The Berkeley Foundation
- The Elsevier Foundation
- The Exilarch's Foundation
- The Goldsmiths' Company
- Department of Health and Social Care
- Hg Foundation
- Huawei Technologies UK
- John Lyons Charity
- The Lujenna Educational Trust
- The Mohn Westlake Foundation
- NIHR Imperial Biomedical Research Centre
- Ms Marianne Odfjell
- Stanhope Plc
- The Sutton Trust
- Mr Kevin J Walters
- Mr Richard Weber
- The Worshipful Company of Coachmakers & Coach Harness Makers

And with thanks to all those who wish to remain anonymous.



societal_engagement@imperial.ac.uk



www.imperial.ac.uk/be-inspired/societal-engagement