

**Imperial College  
London**



# Science for Everyone

How your support enables us to develop skills,  
confidence and connections in science,  
technology and business as never before

# About the campaign

In 2022 we launch a major fundraising initiative that will see the Imperial College London community coming together around a new vision for outreach and engagement.

Our goal is to raise £25 million to support Science for Everyone, a programme of events and activities that will give people the opportunity to get involved with science as never before.

Science for Everyone will focus on building science skills, public engagement, inclusive innovation and new global collaborations. Combining digital with hands-on events and activities, it will reach communities across the UK and internationally, particularly in the most disadvantaged areas.

Past philanthropic support has been transformative, turning Imperial into one of the world's most inventive and impactful centres for university science outreach.

As we open a new chapter, your gift builds on these foundations, supporting existing activities with proven impact and enabling us to pioneer new initiatives which will touch the lives of thousands.



# Igniting curiosity

**The mind isn't like an empty bottle that needs to be filled, as the saying goes, but rather like kindling, that needs only a spark to burn with its own curiosity and creativity. This analogy was first made a couple of thousand years ago, but it still rings true. Throughout my career as a scientist and educator, the most important thing has been to find a way to kindle students' interest and bring topics alive in a way that makes sense to them. That moment when the mind catches light is something that you can feel and see in students' eyes.**

Imperial's outreach and engagement mission is all about tapping into this natural curiosity about the world. We have worked with young people, teachers and communities to co-create an incredibly varied range of programmes that offer opportunities for people of all ages and backgrounds to connect with science in a way that feels right for them. From hands-on science for younger children to specialist support for A-level students, and from a leading festival of the arts and sciences to stand-up comedy lessons with a scientific twist, we invite everyone to share in the excitement of science and technology.

The last ten years have seen a rapid expansion in the scale and reach of our activities. Locally, we have developed an innovative programme of community outreach with our neighbours at White City, the location of our new research campus and home to our community innovation space – The Invention Rooms. We have rolled out new digital learning and mentoring programmes that have enabled us to bring cutting-edge Imperial science to entirely new audiences, not just in the UK but internationally. It has been a great privilege to work alongside Imperial staff and students in developing and refining these programmes.

Now we want to go even further. The Science for Everyone campaign will raise £25 million over the next five years to protect and grow our existing programmes, as well as launch new initiatives to support the most underrepresented – locally, nationally and globally – especially those who have been most affected by the COVID-19 pandemic. This endeavour is urgently needed. As science and technology become ever more central in our working and home lives, we need to ensure that everyone, no matter their background, has the opportunity to gain the skills and confidence to realise their ambitions. With your support, we can be bold in our vision for inclusive science, innovation and growth.



A handwritten signature in black ink that reads "Maggie Dallman".

**Professor Maggie Dallman**  
Associate Provost (Academic Partnerships)  
Vice President (International)



# A science-focused university with a proven track record of innovative outreach

**Imperial College London is one of the world's leading universities, with an international reputation for excellence in education and research in science, engineering, business and medicine. Located in the heart of London, Imperial is a multidisciplinary space for education, research, translation and commercialisation, harnessing science and innovation to tackle global challenges for the benefit of society.**

The South Kensington Campus is home to most of our academic departments and is where much of our undergraduate teaching takes place. Three miles to the west, the White City Campus is home to a network of research facilities and spaces for innovation that bring together scientists, entrepreneurs and the public to collaborate in new ways.

Imperial has been investing in outreach and engagement for decades. Our oldest programme, the Pimlico Connection, was established more than 45 years ago to bring mentoring in science subjects to children

from underrepresented backgrounds. Since then, we have grown our outreach activity, building one of the country's largest and most experienced teams of outreach professionals, and involving thousands of staff and students in our work. Each year around a thousand young people participate in our outreach programmes, with thousands more connecting with us online.

Our outreach and engagement activities take place in a range of settings: in schools and community centres, at our South Kensington and White City Campuses, and increasingly in digital formats. Digital enables us to connect with communities across the UK and beyond at a scale not possible through conventional means. In-person events and activities allow people to experience science directly and to reach households who may not have reliable digital connectivity. By combining the two, we have the best of both worlds.

↑ [The Pimlico Connection has been running at Imperial since 1975 and sees students volunteer as tutors in local schools.](#)



The **Wohl Reach Out Lab** at the South Kensington Campus and **The Invention Rooms** at the White City Campus are focal points for much of our work. The Reach Out Lab is a laboratory space for young people to get hands-on with science – from seeing what it’s like to perform a mock operation in a pop-up surgery, to carrying out titration experiments. The Invention Rooms provides a unique combination of community spaces including the Dangoor Reach Out Makerspace, an immersive workshop with a variety of tools such as 3D printers, scanners, laser cutters and woodworking equipment, giving school-aged young people a space to experiment, design and innovate.

We offer a range of digital learning options, e-mentoring, science activity packs, teacher training and public events such as the **Great Exhibition Road Festival** and **Imperial Lates**. These reach tens of thousands of people each year – helping to raise attainment in schools, improve access to leading universities and empower people to engage with the science issues of the day, from COVID-19 to climate change.

In all our activities – in person or online – participants interact with Imperial students and staff, an experience that is beneficial not only for the young people who get to meet a range of science role models but also for our students who learn to inspire others about their science and research.



[Activities at the Wohl Reach Out Lab allow young people to get hands on with science.](#)

# Expanding our reach

Over the last five years, we've expanded our reach, bringing inspiring science programmes to communities across London and the UK.



More than  
**1,000**

young people from underrepresented backgrounds benefit from our intensive schools outreach programmes every year.

More than  
**20,000**

people viewed or took part in our festival and Lates programme during the first 12 months of the pandemic in the UK.

Our Great Exhibition Road Festival attracted more than  
**60,000**

visitors in 2019.

More than  
**50,000**

children have benefitted from our free online learning resources for primary school and A-level students.

Over  
**4,000**

science activity packs have been distributed to local children and families to help with science learning during the pandemic.

We have collaborated with more than

**27**

local community partners and organisations in White City.

More than  
**500**

of our students and staff have taken part in societal engagement training and development each year.

Thousands of people each year enjoy the Great Exhibition Road Festival, a collaboration between cultural and research institutions based in South Kensington.

# Our philanthropic priorities

Building on more than 45 years of experience in outreach and engagement, our goal now is to extend our reach further, to connect with more people across London, the UK and internationally, and build skills, confidence and engagement with science and technology. Philanthropy will enable us to realise our vision for a new and expanded programme of activity across four strategic themes:

---

## STEM learning

We will offer new opportunities for young people of all ages and backgrounds to gain new skills and confidence in science, technology, and innovation. From focused support for A-level students to online and hands-on science sessions for younger children, we are building skills for the future.

---

## Local inclusion

At White City we are working with local partners to create an inclusive innovation ecosystem that creates opportunities for everyone in the community. From developing skill and employment pathways to training youth leaders, we are pioneering new approaches to inclusive innovation.

---

## Science for society

By lifting barriers to participation, we can make science more accessible, enabling people to connect with and influence our science in a way that feels right for them, whether as a 'citizen scientist' working alongside Imperial researchers, or by taking part in our events.

---

## Global development

We want to reach out beyond our borders to work with research institutions and entrepreneurs in low- and middle-income countries. Global collaboration will create new opportunities for two-way academic exchange and the launch of a centre for enterprise in partnership with the leaders of Africa's digital innovation scene.





---

Philanthropy has played a pivotal role in outreach and engagement at Imperial. Foundational gifts from the Maurice Wohl Charitable Foundation, the Mohn Westlake Foundation and the Exilarch's Foundation have supported the creation of the Wohl Reach Out Lab, The Invention Rooms and the Dangoor Reach Out Makerspace. Many other funders have generously supported individual programmes. We are grateful for every gift; each has had a significant impact on lives of the children, young people and communities that have been touched by our work.



# STEM learning



**STEM Potential has given me much-needed support in A-levels and university applications. The mentors are willing to give you help every step of the way – having them there to advise, guide and be by your side is amazing.**

Nabeeha,  
now studying  
medicine



**More than ever before, our working lives are defined by science and technology. In all sectors, employers are looking for digital and tech skills. Advanced skills in maths and science are needed across a range of roles in computing, health and engineering. Digital skills are required in almost all new roles.**

Imperial plays a key role in equipping young people with the skills to take advantage of the new opportunities for careers in science and tech. We also help to ensure that everyone has the skills and confidence needed to make use of new workplace technology.

We offer a range of programmes that focus on supporting young people to excel. Targeted at GCSE and A-level students from backgrounds underrepresented in higher education, **STEM Potential** offers lectures, masterclasses and a summer school, together with practical help in applying for university. **Pathways into Medicine** supports 16–18-year-olds from state-funded

schools to pursue a career in medicine. Our unique **mA\*ths** programmes combine open access digital resources with one-to-one mentoring and masterclasses to support young people to get top grades in A-level Mathematics and now, with support from the Hg Foundation, Further Mathematics – a prerequisite for studying many science programmes at leading universities.

We are also connecting with young people who might not think formal science is for them but who enjoy using technology creatively to solve problems. Based at The Invention Rooms in White City, the **Maker Challenge** enables children and young people from the local neighbourhood to design, build and test prototype innovations. With the freedom to experiment and make, participants have come up with astounding ideas, from pens designed for people with poor grip, to a mini projector that enables immersive video calls with friends and family. Participants develop new skills and confidence, gain insight into university life, and learn how to think as an entrepreneur.



**The Maker Challenge has been one of the most incredible experiences. I assumed the programme would be solely educational – not only did I participate in many interactive activities with other students who shared similar interests, but I was also given the opportunity to discover new things about design and STEM in a genuinely fun way.**

Rafia, Year 11,





## OUR PHILANTHROPIC GOALS

**Philanthropy enables us to expand high-impact programmes and raise attainment. With your support we will:**

- launch new activities engaging children from primary school through to sixth form
- expand the subject range and coverage of our cohort programmes and digital resources
- blend digital and in-person activities to reach the most underserved regions in the UK
- develop and sustain innovative models of teacher support and training.

**Together, we will bring innovative science outreach to the most underserved communities and help to close the skills gap.**



Left: At the Dangoor Reach Out Makerspace young people design and build their own prototype innovations.

Far left: Pathways to Medicine radiology and oncology taster session with Dr Nicola Strickland.

# Local inclusion



I've lived just around the corner in Shepherd's Bush for the last 40 years and before coming to What the Tech?! I didn't know anything about Imperial at all, except seeing all these new buildings going up. I knew I needed help to start using a mobile phone for more than just making a phone call – I wanted to start sending text messages but just couldn't work out how. The help has been fantastic because it's given me hope that I can now start using my phone, which I didn't have before.

Michael,  
a local resident and  
What the Tech?! participant



**The creation of our new White City Campus allows us to connect – and collaborate – with local communities on an unprecedented scale. We have forged close relationships with residents and organisations, listening to their views on local challenges, from social isolation to air pollution. Together, we are co-creating new programmes that reflect the priorities of local people and make tangible improvements in education, employment, enterprise and health.**

We have introduced a range of **extracurricular activities** for children and families that have been attended by thousands over the last five years. Regular workshops for children have focused on practical science, with opportunities to learn coding, prototyping and making. Other activities include Creative Roots, where children explore the natural world, and Saturday Science Club, a free course for families of primary-aged children to support science learning outside school.

↑ Creative Bricks challenged a group of children aged 9–11 to investigate architecture and building materials in White City.

For older residents we have established a **free tech support service** run by Imperial students. What the Tech?! offers help with laptops, mobile phones and other devices, improving digital skills while helping to counter the isolation often felt by older residents. During the pandemic period, more than 100 local residents have received one-on-one support, and people have reported feeling better connected, less isolated and more confident online.

We are working with local organisations who have great ideas about how to address challenges in the area but who don't always have the resources and confidence to put their plans into action. Launched in 2018, **Agents of Change** is a network and skills development programme for women leaders in White City and the surrounding areas. The goal is to empower and connect female community leaders of all ages, sectors and backgrounds and, through their leadership, build resilience in the community.



## OUR PHILANTHROPIC GOALS

**We want to grow our programme of local engagement and collaboration into a leading model of inclusive innovation. Philanthropy enables us to:**

- develop skill and employment pathways to support people from the most underserved local communities to access new opportunities
- expand support for local young people by helping youth groups deliver informal science learning and by improving access to work experience
- increase support for local women change-makers through our Agents of Change women's leadership programme and network
- equip local entrepreneurs by enabling small businesses to benefit from the incubation facilities and networks we have developed at White City.



What the Tech!?! is a student-led workshop for the over-50s, offering advice on any gadget or online task.

# Science for society



**This year I started Hello World Hack, a one-day workshop to introduce girls in Years 3–5 to coding and technology. Thirty girls attended and I plan to continue running these events after I graduate. It's important to reach out to schools, children and young people so no-one misses out on getting to grips with the amazing technology we have today.**

Vanessa Madu (Mathematics) was awarded the 2020 President's Student Award for Excellence in Societal Engagement



**As one of the world's leading science-focused universities, Imperial plays an important role in making science accessible. In partnership with local people and organisations, we are exploring ways to remove barriers to participation in science and our research. It is a conversation that benefits everyone, bringing new community perspectives that help shape our research, whilst building participants' confidence and interest in the sciences.**

We have pioneered a range of initiatives to engage people with science and technology. At the heart of this is the **Great Exhibition Road Festival of science and the arts**, a unique celebration led by Imperial in collaboration with South Kensington's museums and cultural organisations. Together we engage thousands of people of all ages and backgrounds with a creative range of activities that take place on and around Exhibition Road for a weekend in summer and online throughout the year. Visitors can meet Imperial researchers face to face and experience their research directly. Science and the arts – too often separated – are fused to provide an inspirational range of talks, performances, workshops and exhibitions.

Hundreds of our staff and students take part in engagement activities every year, making Imperial one of the most active universities worldwide when it comes to public engagement with science. In 2016 we established the **Engagement Academy**, an extensive programme of training and guidance to support our staff in designing, delivering and evaluating effective engagement activities. Each year 20 members of staff complete the Academy and are now bringing their innovative outreach ideas into the community.

Imperial researchers have embraced the concept of the 'citizen scientist' – individuals who contribute directly to research by shaping research questions, collecting data or carrying out data analysis. In one example, more than a million people shared information with Imperial researchers on biodiversity loss, climate change and environmental degradation. The benefits of citizen science projects are measured not only in terms of their scientific impact – important though that is – but in their ability to create a dialogue between researchers and members of the wider community. This connection gives people an insight into 'how science works' and allows research design to be informed by insights from the public.



In 2019 Imperial joined forces with 17 local institutions in the Great Exhibition Road Festival which attracted over 60,000 people in a celebration of the arts and sciences.



## OUR PHILANTHROPIC GOALS

**With philanthropic support, we can establish the Great Exhibition Road Festival as one of the world's most creative and inclusive festivals of the sciences and arts by:**

- co-designing with local communities an exciting programme of events that is accessible and engaging to our target audience
- including sessions that appeal to a broad range of people – from activities for children with autism, to events celebrating LGBTQ+ contributions in the sciences and arts
- handing over the curatorial reins to a diverse group of young people from our local communities, newly trained through our Youth Producers initiative.

**With your support we can also pioneer new approaches to inclusive science by:**

- launching a citizen science initiative that involves people directly in research – initially focused on achieving zero pollution
- offering in-person and online events to give participants from across the UK the opportunity to be involved at every stage of the research process, from helping to design and roll-out national research projects, to sharing their views while researchers evaluate potential climate solutions.



International science in a post-Brexit Britain: the topic of one of our series of public Imperial Lates events.



→  
Performers at the 2019 Great Exhibition Road Festival.

# Global development

# 55%

of Imperial research is published as a result of international partnerships

# 192 countries

Our research is in collaboration with partners in 192 countries

**Imperial is one of the world's most international universities, with staff and students from more than 140 countries and a network of research partnerships that span the globe. Many of these collaborations, particularly those addressing global challenges such as climate change or sustainable development, are with researchers and institutions in the developing world. Our partners and alumni regularly tell us of the difficulties they face in conducting research in low- and middle-income countries, where universities are often under-resourced, opportunities for advanced study are limited, and links with industry and entrepreneurial activity remain weak. What if we could harness our experience of establishing international partnerships and research-intensive culture as a way of co-creating research and innovation capacity in partner institutions around the world?**

Imperial has a strong track record of leading research and education capacity-building collaborations in low- and middle-income countries. Through centres such as the Grantham Institute for Climate Change and the Environment, the Institute of Global Health Innovation and the newly launched Global Development Hub, we can strengthen partnerships in the developing world and **co-create research and education capacity** in our partner institutions.

Our collaboration with the African Institute of Mathematical Sciences (AIMS) provides a model for this, combining advanced training, opportunities for research exchange visits, and a vehicle for fostering new research partnerships between Imperial academics and leading African scientists.

What does innovation and entrepreneurship look like in low- and middle-income countries? It's a question that Imperial researchers take seriously, working to understand the potential for economic and societal benefit, as well as the barriers posed by poor infrastructure and the lack of access to prototyping facilities.

Imperial has extensive experience in growing innovation ecosystems: since its 2016 launch, the Imperial Enterprise Lab has supported the creation of 209 student startups which have collectively raised more than £50 million in investor funding.

Our aim now is to adapt the Imperial model – guided by local partners – to support innovation and enterprise in low- and middle-income countries. Initially focusing on West Africa, we will develop programmes that combine training, business coaching and the provision of workshop facilities, enabling entrepreneurs to generate employment and turn their innovative ideas into marketable products.



**The partnership with AIMS brings benefits to both sides. The students are inquisitive and enthusiastic – they bring new ideas, ask questions and challenge assumptions and this injects life into our mathematical endeavours. It allows us to engage and empower our partners there to have a direct impact on public health by applying modelling in health situations and working to overcome the challenges that African countries are facing.**

Professor Maria-Gloria Basanez, School of Public Health







## OUR PHILANTHROPIC GOALS

**We believe that innovation thrives through international collaboration. With philanthropic support, we can support research, education and entrepreneurship in lower and middle-income countries to deliver real-world impact and tangible societal benefit. We will:**

- co-design and co-deliver a series of Enterprise Lab affiliate programmes to develop innovation ecosystems and aid job creation
- scale up the WE Innovate programme to promote female entrepreneurship at an international level
- break down barriers to collaboration through remote PhD supervision, enabling doctoral candidates to study at their home university while receiving support from Imperial's faculty
- create a world-leading Global Development Hub Doctoral Training Academy to support students from developing countries
- support an International Research Opportunities Programme to enable exchanges of students and researchers.



Top: Pathways to Equitable Healthy Cities sees Imperial academics partner with colleagues in six major cities around the world to utilise big data to reduce health inequalities.

Left: Imperial's GoGlobal module takes students on a three-week cross-cultural collaborative project, covering globally significant themes.

# Philanthropic opportunities – how to get involved

**Philanthropy has played a pivotal role in outreach and engagement at Imperial, enabling the creation of the Wohl Reach Out Lab and The Invention Rooms, and supporting some of our most exciting programmes for children and young people.**

Now we are inviting friends and alumni to join our Science for Everyone campaign with a donation to any one of our four priority areas. From growing programmes and spaces such as STEM Potential and The Invention Rooms, to bringing our innovation expertise to entrepreneurs in low- and middle-income countries, there are many ways your support can make a tangible difference to society on a local, national and global scale.

As well as supporting programme costs directly, philanthropy enables us to create an endowment that will provide long-term security for outreach and engagement. Unlike expendable gifts which are spent directly over a set period of time, an endowment gift is invested to generate an annual payout in perpetuity. With many existing programmes reliant on short-term funding, an endowment would be a source of sustainable funding and continuity for programmes with proven impact.

We welcome the opportunity to discuss with you the many ways an outreach and engagement philanthropic gift can help realise Imperial's vision.

## CELEBRATING THE IMPACT OF YOUR GIVING

We work with each donor to understand how they would like to be involved and recognised. Naming opportunities are offered in recognition of transformational gifts and we invite individual discussions on the possibilities. Keeping donors updated about the impact of their gift is a priority, through regular reports and invites to special events.

## WE INVITE YOU TO JOIN OUR SCIENCE FOR EVERYONE MISSION

We are at a pivotal point in society, where those without access to the benefits that world-class science and technology offer risk being left behind. But we have an incredible opportunity for change and to truly make Science for Everyone. Given the disruption caused by the global pandemic and the rapid pace of technological and environmental change, we believe that now is the moment to act. Join us in this mission to make a difference.

For more information on the activities profiled here, and to discuss opportunities to support our vision, please contact:



**Dr Sarah Flew**  
**Deputy Director of Development**  
s.flew@imperial.ac.uk  
+44 (0)20 7594 9325

[The Aeronautics Open](#) →  
Day aims to inspire the next generation of aerospace engineers – particularly girls, who are underrepresented in the sector.







Forensic analysis and DNA profiling at the Faculty of Medicine summer school.