We are celebrating your support.
Contents

2–3
President’s welcome.

4–7
We are bringing people together.

8–13
We are unleashing potential.

14–25
We are solving global problems.

26–41
We are recognising your generosity.

← Architect’s render of the planned School of Public Health.

← Front cover: Benjamin Hilton, President’s Scholar (Physics).
On behalf of everyone at Imperial College London, thank you for your support. Your philanthropy enables us to excel in research and education for the benefit of society.

The stories in this report highlight some of the many ways that your donations make a difference in the quality of our research, the education and lives of our students, and our ability to make important advances in addressing society’s most pressing problems.

Our public health researchers are working to improve children’s health in one of London’s most deprived neighbourhoods, and in communities around the world (p16). Alumnus Marit Mohn’s transformative gift will create a state-of-the-art centre for children’s health and wellbeing at our White City Campus. Quinbrook Infrastructure Partners are the benefactors of Imperial’s Centre for Climate Finance and Investment, where specialists are working to steer the business community towards safer, cleaner investments (p18).

Our talented students benefit from generous scholarship donations and they, in turn, contribute to society. President’s Scholar Graham Peyton and Raising Scholar Hamid Soleimani are developing new, low-cost medical technologies that could revolutionise healthcare in remote, rural communities (p12).

These are but a few examples of the inspirational achievements made possible by your generosity. In the following pages, you will see how your philanthropy is bringing people together, unleashing potential, and helping us surmount some of the biggest challenges we face. You will see how gifts large and small make a difference, from transforming the entire College to changing a student’s life in a deeply personal way. I hope you will see just how much your support is valued and appreciated.

In our College 2015–2020 strategy, we committed to building a supportive, diverse, considerate and highly motivated community, and to building and maintaining better ties with friends and alumni. We committed to enriching the student experience, strengthening ties with business, academia, and non-profit, healthcare and government institutions across the globe, and to sharing the wonder and importance of what we do. Your philanthropy is enabling us to achieve all of this and more, and we are sincerely grateful for your generosity and support.

Thank you, once again, for giving to Imperial College London.

Professor Alice P. Gast
President
We are bringing people together.

In 2017–18, 13,354 people together raised a phenomenal £59.1 million for research and education at Imperial College London. This is an incredible success, achieved through collaborative efforts between Imperial alumni, friends, students and staff. Here are just a few highlights from an extraordinary year.

Leading the way

A £25 million gift from Marit Mohn (MSc Chemical Engineering and Chemical Technology 1973) will create a Centre for Children’s Health and Wellbeing at the new home for Imperial’s School of Public Health in White City. Marit Mohn is a generous supporter of education and community development in West London and a longstanding friend and donor to the College. Her leadership gift was announced at the launch of Imperial’s £100 million philanthropic campaign for the School of Public Health, which will enable us to build an innovative and interconnected hub for research, education and community engagement focused on health and wellbeing. (See p16 for the full story).

Library love

The generosity of everyone who donated to the Library Fund over the past three years has enabled ongoing improvements to the Central Library. This year, levels four and five were fully refurbished with a new cooling and ventilation system and power access at all desks. A particularly meaningful contribution came from Mr Alan Patrick (Metallurgy 1952), who left a legacy gift of £40,000 when he passed away in March 2017. Mr Patrick’s family visited the library in 2018 for the unveiling of his commemorative name plate.

Our donor community spans generations, ranging in age from 21 to 106.
Paying it forward

Mr Yuangao Liu (Civil Engineering Research 2006) gave £100,000 to the Lee Family Scholarship Fund – the Fund that supported him throughout his engineering degree – so that future students would benefit as he had. On hearing the news that a past scholar wished to give back to the Fund he established, Dr Richard Lee (Chemical Engineering 1960, PhD 1964) decided to match the donation with a further £200,000 to create a new scholarship that will support students from Imperial who go on to pursue postgraduate studies at Imperial College Business School.

“I quite simply wouldn’t have been able to study at Imperial without the generosity of Dr Richard Lee. My scholarship has been truly life changing. I hope that my achievements and the outcomes of the other Lee Family Scholars will assure Dr Lee, and other alumni considering making a gift to the College, that such a donation is worthwhile.”

Yuangao Liu (Civil Engineering Research 2006)

Next generation care

Now in its second year, the Jean Alero Thomas Scholarship Programme awarded four new scholarships to students in the Faculty of Medicine, doubling the number offered previously. The programme was established thanks to a legacy gift from Dr Jean Alero Thomas (Medicine 1970), a dedicated lecturer and researcher whose work focused on the application of immunopathological techniques to diseases caused by viruses. Thanks to her generosity, the Jean Alero Thomas scholars are being supported to pursue postgraduate study in cell and molecular biology, which underpins research into a wide range of diseases.

Our donor community spans the globe. This year, we received gifts from 79 countries.

8,116 people donated to the College for the very first time in 2017–18.
We are bringing people together.

An active community

A significant gift from the Sackler Trust will support research at Imperial’s world-leading Sackler MSk Lab, helping a team of surgeons, physiotherapists, scientists and engineers to develop new surgical tools and techniques to improve musculoskeletal health. Collaborating closely with patients, the Lab works to bring innovative treatments to as many people as possible, so they can pursue active, independent lives for longer.

Creative engagement

A £500,000 gift from Mr Humphrey Battcock is enabling Imperial’s Public Engagement team to develop innovative ways to engage new audiences with science. A varied programme of creative debating experiences is exploring contemporary scientific issues that hold relevance to researchers and the public alike, many of which are developed in close collaboration with members of the community. This year’s series, designed to complement and enhance the Imperial Festival and Fringe programme, included a project with drama company Theatre of Debate, in which patients, clinicians, actors and script writers worked together to produce a thought-provoking performance about antimicrobial resistance. A post-event discussion enabled participants and audience members to share their thoughts, experiences and questions surrounding the topic.

3,941 of the gifts made this year were from College alumni.

All on board

Members of Imperial College Business School Advisory Board came together to create a new scholarship programme at the Business School. Thanks to their donations, the Advisory Board Scholarships Programme will offer two exceptional candidates per year the opportunity to enrol on the full-time MBA course, with all tuition fees covered.

Sharing a passion

Imperial’s much-lauded lunchtime concert series has been a hallmark of College life since the 1950s. One of the key figures in establishing the series was Imperial Emeritus Professor Malcolm Haines, who was a long-standing member of the Plasma Physics Group and an accomplished pianist and organist. After Professor Haines passed away in 2013, his wife Mrs Polly Haines decided to commemorate his life with a generous gift which will share his passion for music with the College community by supporting one lunchtime concert each year for the next decade.

“Before the Blyth Centre for Music and Arts was established, Malcolm was glad to help set up the lunchtime recitals at Imperial. Today, I am glad to contribute to the lunchtime concerts and know that Malcolm would be pleased that music is still a key part of life at Imperial.”

Polly Haines
We are bringing people together.

The Schistosomiasis Control Initiative

The Schistosomiasis Control Initiative (SCI) supports countries to deliver programmes against parasitic worm infections, which affect over 1 billion people in some of the world’s poorest communities. These infections can leave children unable to go to school, adults unable to work and increase the risk of HIV in women. Thanks to philanthropic support, the SCI is reaching more people than ever before and is working towards the elimination of these diseases. Dr Wendy Harrison, Executive Director of the SCI, explains.

“We’ve taken great pride in our achievements ever since our foundation in 2002. We have, for example, supported the delivery of over 150 million treatments against parasitic worm infections in 15 sub-Saharan countries. This would not have been possible without our supporters. The regular donations we receive enable us to support long-term programmes, making them sustainable, resilient to new challenges and able to reach more communities affected by these diseases.

“But there’s still a way to go. Currently, we focus primarily on providing treatments against parasitic worm infections, as this has been shown to reduce the disease burden in populations most quickly. However, to eliminate these diseases for good, we also need to address the underlying factors sustaining disease transmission, such as helping those affected to adopt behaviours that can lower their disease risk.

“We recognise that we will not be able to do this alone. Through the development of strong partnerships, greater investment into research and collaborative work to strengthen systems and processes, we aim to take on these additional challenges and make the greatest impact.

“It’s never far from our minds that everything we do is enabled by the people who support us. Thanks to the partnership and generosity of our donor community, we really are helping change people’s lives for the better and enabling them to achieve their full potential. And that’s an amazing thing to do.”
“I would like to sincerely thank all the donors who so generously support the President’s Scholarship Fund. They have allowed me the freedom to focus on my research without worrying about money. Thank you.”

Katia Hougaard
President’s Scholar (Life Sciences)
Gifts from friends and alumni help us offer life-changing opportunities to bright, ambitious young people. Whether you’re donating to scholarships, hardship support, extracurricular experiences or community outreach programmes, your gifts are helping to inspire and enable the next generation of thinkers, leaders and problem-solvers.

We are unleashing potential.

President’s PhD Scholar Katia Hougaard discusses her research with donor Dr Denis Gross (Physics 1973) at the RCS1 plant facility in the Sir Alexander Fleming Building. Katia is investigating the role of resistance genes in plants’ natural defences to aphids, in the hope that this will lead to the development of smarter, safer strategies for controlling aphid outbreaks in economically important crops.
Bursaries relieve hardship and provide enriching university experiences.

Thanks to your support of the Deans’ Funds, medical student Dan Mawhinney was able to relieve his financial anxiety and participate more fully in student life.

“I chose to study at Imperial because of its international reputation for excellence. I have seen this excellence reflected in my six years of study. I particularly valued my placement in A&E, where I felt well-equipped to be the first medic to see patients.

“The last two years of my degree have been particularly tough financially. I found that I was slipping into more debt, despite also working a part-time job. I was on placement and studying during the week, and then heading to work at the weekends – it was exhausting. Receiving a bursary from the Dean’s Fund for Medicine was such a relief – I don’t have to worry as much about money, and it has freed up some time in which I can recharge. I could afford to go to a conference, which I wouldn’t have considered before, and I can participate more fully in clubs and societies. I also spent a month volunteering in a clinic in Roatán, Honduras, where I consulted with patients myself under the indirect supervision of the local doctors (see left). This was a great opportunity to develop my confidence in diagnosing and managing common ailments, and I welcomed the opportunity to practise my Spanish, which had been a key objective while organising my elective.

“I would like to thank all the donors – I am so grateful to them for their generosity, without which I would have struggled. It really has made an impact on my experience at Imperial, my academic performance, and my wellbeing.”

1,128 people gave to the Deans’ Funds in 2017–18, raising £403,415 across all of Imperial’s faculties.
Scholarships allow our students to push their academic boundaries.

Thanks to your support of the President’s Scholarship Fund, Imperial College Business School PhD student Mara Guerra was able to build a foundation for her career in academia.

“Imperial’s Business School was my top choice for my PhD because it is committed to innovation and entrepreneurship, and has a vibrant community evolving around student start-up networks.

“This community of students undertaking research in their chosen fields of expertise, alongside my attendance of entrepreneurship and innovation events, inspired my research focus. I have chosen to research the current technology commercialisation of start-ups in the photovoltaic industry. This involves gathering large datasets which reveal how successful start-ups have commercialised new technology, despite the difficulties they inevitably face. I believe start-ups will introduce the technologies that revolutionise our world and change how we live. Imperial is the perfect place to study the success of start-ups because of the entrepreneurial spirit of its students.

“My President’s Scholarship has allowed me to pursue my dream of a career in academia. This includes presenting my research at a conference where I built connections and received feedback from world-renowned academics. I would like to thank the donors for making it possible for so many young people, like myself, to carry out cutting-edge research, and for giving us the confidence to share our work and push boundaries within our chosen fields of expertise.”

1,183 people gave to the President’s Scholarship Fund in 2017–18, raising £224,018.
Innovative students use their Imperial education to make a difference.

For their low-cost, portable medical imaging device which can conduct and display ultrasounds on tablets or smartphones. Thanks to their work, the possibility of bringing life-saving medical imaging to isolated regions and developing nations is now within reach. Graham and Hamid are taking their journey a step further by working on the possibilities of wearable ultrasound devices in the US, after being approached by medical imaging specialists, Butterfly Network, Inc.

As well as being business partners and sharing a passion for bioengineering and entrepreneurship, Graham and Hamid are both scholarship recipients. Graham is a recipient of a President’s PhD Scholarship, while Hamid is a Hans Rausing PhD Scholar, supported by the Arcadia Charitable Trust. Their story acts as an outstanding example of the way in which financial support from friends and alumni of the College allows truly excellent students to translate their academic study into real-world application. Hamid says of his scholarship: “The generosity of donors has inspired me to do my best and make a significant contribution to my field.” Graham says: “Every morning, when I walked up the steps leading to my office, I would think of how great a privilege it is to be studying at Imperial. This was made possible through the generous contributions of those who help fund scholarships. Thank you. My life will never be the same!”
Meet your makers.

White City teenagers bring ideas to life through Imperial’s Maker Challenge.

Name: Cindy Xhebro
Age: 15
Project: Sneaker Speaker

“My idea was to develop trainers with built-in speakers connected to a device (e.g. smartphone) via Bluetooth, powered by a lightweight LiPo battery. The inspiration came from a combination of my personal interests: basketball, music and trainers. I thought putting music and trainers together would make a basketball game more lively!”

Next steps: “To develop the shoes into being more effectively powered. I would like to experiment and find a way for it to be powered using kinetic energy by the shoes charging as the consumer takes steps.”

Name: Madeena Hadafmand
Age: 15
Project: Lumi Lamp

“The idea behind my invention, the Lumi Lamp, was based on my lack of sleep and my curiosity to invent something that could bring me closer to having a full good night’s sleep. I struggle to sleep in complete darkness, but I know it’s not good to leave a light on all night. The Lumi Lamp monitors your breathing and movement during the night and turns off automatically, once it has detected that you have fallen asleep.”

Next steps: “I plan on studying and entering the field of engineering at university but, in the meantime, I’m also looking for more opportunities where I can continue to make inventions.”

Making ideas a reality
The first of its kind in the UK, The Invention Rooms is a new and unique space for community innovation in White City. Offering advanced prototyping equipment, design studios and hackerspaces, The Invention Rooms brings members of the local community together with Imperial’s academics, students, alumni and partners, inviting them to get creative, build prototypes and share in the fun of making and discovery. Over the coming years, we hope to inspire generations of inventors, entrepreneurs and makers from the local area and beyond.

The Invention Rooms and Reach Out Makerspace programmes are supported by the Mohn Westlake Foundation, the Berkeley Foundation, JP Morgan Chase Foundation, Garfield Weston Foundation, the Elsevier Foundation, the Ben-Brahim Family Fund, the Higher Education Funding Council for England (HEFCE) and the Worshipful Company of Coachmakers and Harness Makers.

If you would like to support outreach at Imperial, please contact Clare Dodds, Head of Trusts and Foundations, on +44 (0)20 7594 1829 or at c.dodds@imperial.ac.uk

Annual Fundraising Report 2017-18 13
“The Kadoorie Charitable Foundation has given us an unprecedented opportunity to address one of the major public health issues in Lao PDR and reach thousands of people at risk of cholangiocarcinoma. We could not be more grateful.”

Simon Taylor-Robinson
Professor of Translational Medicine
We are solving global problems.

Gifts to research and College priorities help us tackle some of society’s biggest challenges – from preventing disease and predicting natural disasters, to supporting safe AI and climate-friendly investments. Thanks to your generosity, our students and academics are making discoveries that will benefit communities around the world – both now, and in the future.

Since 2010, Imperial has brought its expertise in imaging and biomarker research to a programme in Thailand that works with communities at risk of cholangiocarcinoma (CCA), a cancer of the biliary ductal system. CCA is often preceded by a parasitic infection spread through the consumption of raw fish. By combining screening with awareness-raising initiatives, the Cholangiocarcinoma Screening and Care Program (CASCAP) is securing earlier diagnoses and better health outcomes for patients. Thanks to a £1 million gift from the Kadoorie Charitable Foundation, the programme is now expanding into the Lao People’s Democratic Republic.
The best start in life.

Enormous progress has been made in protecting children’s health over the last 25 years. Better access to healthcare, sanitation and mass vaccination programmes have reduced under-five mortality by more than half since 1990. Yet significant health threats remain both locally and globally. In our own community in White City, many children are living with chronic health problems, such as obesity, diabetes, asthma and eczema. We are only beginning to understand the long-term impacts of childhood illness, which can affect health and wellbeing over a lifetime.

Now, thanks to a £25 million gift from alumnus Marit Mohn, Imperial is establishing the Mohn Centre for Children’s Health and Wellbeing, which will unite researchers and clinicians working to improve the health of children and young people in White City and communities around the world.

Imperial is home to many research initiatives with a focus on children and young people, and has world-leading expertise that spans issues such as infectious disease, childhood obesity, diabetes, neonatal health, and many common diseases of childhood, such as asthma and allergies. With the creation of the Mohn Centre, Imperial will, for the first time, have a dedicated space for multidisciplinary children’s health, where researchers focusing on allied themes will work together, sharing ideas and expertise. The gift also allows the appointment of an

“My generation has been lucky. We grew up with advantages and opportunities in life that aren’t available today. The challenges facing children and young people these days are much greater – particularly when it comes to health. That is why I am pleased to be able to support the Centre for Children’s Health and Wellbeing. Its research will help to shape interventions to give children the very best start in life, both here in the UK and around the world. For me, that’s rewarding. I know that my support is making a difference that will last a lifetime.

Like everyone, I want to know that my donations will be used wisely. Finding a good project that’s run by good people can be difficult. But with Imperial, I have that confidence. I am inspired by the expertise and ambition that the College is bringing to White City – an area that I know well from my time on the Board of a local housing association. Walking the streets, you get a sense of people’s lives and the challenges faced locally. It is exciting that my support can help to do something positive for the future of the community.”

Marit Mohn (MSc Chemical Engineering and Chemical Technology 1973)
academic director to develop and lead an ambitious programme of research that aims to tackle some of the greatest health threats facing children and young people.

“What this gift challenges us to do, is to think about how we can bring together Imperial’s incredibly rich expertise in child health in new and complementary ways,” says Professor Deborah Ashby, Director of the School of Public Health. “We already have some good examples of paediatricians and epidemiologists working together – for example, in researching risk factors for developing childhood asthma. The new Centre will be a place to deepen and expand these collaborations.”

The Mohn Centre will also be the base for the landmark White City Cohort Study, which will follow a group of children from birth into adulthood and old age. By monitoring the health of participants over an extended period of time, researchers will deepen the understanding of childhood illness and its impact over the years.

“Establishing the Mohn Centre will see us primed to take on this kind of long-term study, which is crucial to finding out how disease in old age is connected to early life experiences,” says Professor Ashby. “This cohort study will last a lifetime and the findings that come from it will have impact for generations to come.”

The cohort study will also provide a unique insight into the health of children and young people in White City, which will help to shape practical interventions to improve health and wellbeing locally. White City is one of the UK’s most disadvantaged areas, with high levels of child poverty (four in ten children grow up in poverty) and overcrowding (17.8% of households) both factors that have been shown to have a negative impact on health.

“The effects of disease, lifestyle and social disadvantage in infancy are felt throughout life, often only becoming apparent in old age,” says Professor Ashby. “At the Mohn Centre we will develop effective early interventions that ensure future generations have every opportunity to thrive and succeed.”

Transforming health and wellbeing

Imperial’s £100 million campaign for the School of Public Health will enable us to deliver a state-of-the-art building at White City, and amplify our work in four key areas: world health, food and nutrition, community health and policy, and children’s health and wellbeing.

imperial.ac.uk/giving/transforming-health/

To support the campaign, please contact Angela Bowen, Director of Development, Faculty of Medicine on +44 (0)20 7594 1277 or at angela.bowen@imperial.ac.uk
Unlocking climate investment.

With interest in renewables and clean technology at a high, why isn’t more investment flowing into these emerging sectors? Imperial’s Dr Charles Donovan explains how a new research fellowship supported by a £525,000 donation from Quinbrook Infrastructure Partners could help to provide the clarity that investors need.
Dr Charles Donovan, Director of the Centre for Climate Finance and Investment.

The 2015 Paris Agreement on climate change could unlock opportunities for investment worth trillions of dollars, as countries around the world begin to drive a shift towards a low-carbon economy. But while investor interest in renewables and clean tech is increasing, we aren’t yet seeing the level of investment that would be required to affect the kind of transformation that’s needed if we are to avoid catastrophic climate change. What’s holding investors back?

The problem, according to Dr Charles Donovan, Director of the Centre for Climate Finance and Investment at Imperial College London, is that big institutional investors don’t have the data they need to make informed decisions about where to invest. “The investment community has really woken up to climate change over the last couple of years,” says Dr Donovan, “but until they have a better sense of the risks and rewards involved, we’re not going to see the kind of investment that’s needed to accomplish the transition to a low-carbon economy.”

It was to help investors and policymakers overcome this lack of clarity about risk and return in emerging clean technology sectors that the Centre for Climate Finance and Investment was established in 2016. Based in Imperial College Business School, the Centre brings together Imperial’s expertise in finance, data science and climate research to analyse investments in clean energy, energy efficiency and low-carbon infrastructure globally. Dr Donovan believes that the Centre’s data-driven approach can help to cut through investor uncertainty. “Investors want to invest in clean technology and are asking how they can do that in a way that’s responsible to their shareholders or pension fund holders. We’re trying to break through this hesitancy, this round-and-round discussion, with really targeted numerical analysis.”

The work of the Centre received a substantial boost in 2018 thanks to a donation of £525,000 from Quinbrook Infrastructure Partners, a low-carbon and renewable energy infrastructure investment specialist. The gift establishes the Quinbrook Fellowship – a new academic post that will bring fresh expertise and additional capacity to the Centre. The successful Fellow’s research will look at the business models, financial instruments and investment strategies that can help the global economy adapt to climate change. “We’re hoping to bring in a world-class scholar who can complement research across the Business School and become a leading voice in this area,” says Dr Donovan.

One priority for the Fellow will be to remain responsive to the questions that the investment community is asking. “Investors can’t wait years for answers,” Dr Donovan says. “We need to think in terms of the weeks and months ahead. That’s where philanthropic support is particularly helpful. This gift enables research on a shorter timescale than would be possible through other sources of funding. It allows us to have immediate real-world impact.”

The fact that the post is philanthropically funded will also make it easier for Dr Donovan to recruit someone who can bridge the academic and business worlds. “Usually, when an academic appointment is made, the focus is on recruiting someone who is fully in the academic world – someone who can build the research profile of the institution. This gift frees us from that. It gives us the flexibility to recruit someone who has that academic background, but whose research is also going to have relevance to, and impact in, the business world.”

Such a major philanthropic investment in the Centre’s research will have a multiplier effect, opening up new sources of funding and signalling the interest that the business world takes in this nascent field. “The gift from Quinbrook Infrastructure Partners is a massive enabler,” says Dr Donovan, “and we are most grateful for their support. Having this philanthropic commitment allows us to bring in additional funding in the form of research grants and research contracts. And since ours is an emerging area of research, this donation will be seen as a vote of confidence. We’re building on their gift to create something that we hope will be here for the next hundred years.”
Computing pioneer remembered with endowed fund for blue-skies research.

A visionary gift from Diana Scarrott (MBA Management School 1998) is creating an endowed fund that will allow Imperial's computer scientists to explore the frontiers of their field. Ms Scarrott has also pledged a generous legacy gift towards the fund, which honours the memory of her late father and renowned computer engineer, Gordon Scarrott.
Professor Daniel Rueckert, Head of the Department of Computing and Professor Alessio Lomuscio, Royal Academy of Engineering Chair in Emerging Technologies (right), discuss what kind of research the new fund could support.

Professor Rueckert, could you give us some examples of blue-skies computing research?

DR: When we say ‘blue skies’, we are often referring to work that may not have any direct application to real life today, but stands to have significant impact in the future.

One example is quantum computing. At the moment, there isn’t a single quantum computer existing in the world that can handle more than a very few qubits. However, once we have the ability to build one, it could break virtually any type of encryption we currently use; so there is a lot of interest in developing new ways for encrypting data. Now, this is unlikely to become a challenge in the next five years, but in 20, it might be a significant challenge.

Another example is my colleague Alessio Lomuscio’s work in the verification of artificial intelligence systems, where he is developing techniques to assess whether a system based on machine learning will always provide the right outcome.

Professor Lomuscio, could you expand on this?

AL: Think about the situations where we want to deploy AI in society – self-driving cars, or controlling groups of autonomous planes, or making diagnoses. We want to guarantee that its behaviour will be safe and reliable. We want to be able to verify that the correct outcome will be achieved in all possible situations.

My work in verification of autonomous systems started around 2001, and it progressed relatively well; there are a number of complex autonomous systems that we successfully verified, including autonomous submarines measuring the salinity of the water. But the big revolution of the past five years is machine learning. Machine learning is driving AI applications in the realm of vision, image and video detection and beyond. However, one of the problems with machine learning is that verifying behaviours is intrinsically very challenging.

How has machine learning changed things?

DR: Computer science up until now has often been very algorithmically driven. So, for example, we can make an if-else statement: ‘if the traffic light is red, stop the car. If the traffic light is green, go.’ These are fairly unambiguous statements and we have mathematical tools to prove that a car will stop at a red traffic light.

However, in a situation where we use machine learning, the challenge might be the following: is the traffic light actually red, or not? You have a camera on a car, looking at the street ahead, and it has to first detect that there’s a traffic light somewhere, and then has to recognise whether the traffic light is red or green. And it needs to work when there’s no lighting, or there’s fog, or it’s raining. We are no longer using systems which you programme with rules like ‘if this pixel on an image is red, then stop’. Instead we have a machine learning algorithm, for example a neural network, which we train – like a human – to look at hundreds of images and identify whether a traffic light is red or green. And we don’t yet have the tools to prove what has actually been learned. That is what Alessio is working on.

AL: Ultimately, the big challenge is that neural networks are so complex that they are very hard to analyse. Traditionally, their behaviour was

---

Gordon Scarrott: a lifetime of pushing boundaries
Throughout his lifetime Gordon Scarrott (pictured left) was well-known as an innovator, inventor and a champion of research that challenged the status quo. In 1959, he and his collaborator George Hutchinson were awarded the Gabor Medal for their invention of the pulse height analyser – an instrument used to determine the energy spectra of nuclear radiations. As Manager of International Computers Limited’s Research and Advanced Development Organisation, he was instrumental in the creation of the Distributed Array Processor – the first massively parallel processor in the world – and the Content Addressable File Store (CAFS), which won him the Queen’s Award for Enterprise in 1985 (formerly the Queen’s Award to Industry for Technology). Even in his retirement he continued to push boundaries, developing a new theory of information engineering on which he published several influential papers.
studied only statistically – which is fine in some applications, but where safety is paramount, you want something to be correct all of the time. When you step onto a plane, the probability of fault that a regulator will accept is $10^{-9}$ for some of the components. This is not where we are with systems driven by machine learning. So our challenge is: how do we give guarantees about systems that are not programmed by humans, but are synthesised by data through algorithms in machine learning? That’s work we’ve started to do here at Imperial.

Does philanthropy play a particularly important role in supporting ‘blue-skies’ research?

DR: Yes. It really allows us to be more adventurous. Philanthropy can plug the funding gap for long-term projects and enable us to take on quite ambitious challenges. If you have only a short-term vision, you’re always playing catch-up with what other researchers, or other countries, are doing. Therefore, supporting longer-term work might also have significant economic benefits in the future.

AL: What long-term funding gives us, from any avenue, is the ambition to think more deeply about challenges that may be coming. It is absolutely fundamental to the health of a university.

How does it feel to have Diana Scarrott’s support?

DR: We’re very thankful to Diana; she has really trusted us with a lot of autonomy. We have the freedom to support the areas of work we believe are the most interesting, the most promising and, perhaps, the most challenging. Diana’s father, Gordon Scarrott, was exploring some of the more pioneering, early ways of solving problems in computer science, and that’s an incredible legacy he left. I think he has really shaped the field with his contributions. With her gift, Diana has also shown a great vision for how computer science can shape the future. The fact that she has endowed her gift means it too will have a very long-lasting legacy. Not only will it help the current generation of computer scientists, but future generations as well.

The Artificial Intelligence Research Network unites experts from across disciplines to respond to global challenges in AI research. For more information, visit imperial.ac.uk/artificial-intelligence

If you would like to make a gift in someone’s memory, or pledge a legacy gift in your will, please contact Anna Wall, Head of Legacy Giving on +44 (0)20 7594 3801 or at a.wall@imperial.ac.uk

22 Annual Fundraising Report 2017-18
Taking chemistry further.

In March 2018, Imperial announced a partnership with Agilent Technologies to boost molecular research and innovation. Following an additional gift of chemical analysis equipment, work on new medicines and crop protection can flourish, as Professor Tony Cass explains.

“Agilent’s instrumentation is very much best-in-field and it’s very broad in terms of its capability. So this donation is creating opportunities to intensify our existing research programmes in chemistry, and enabling us to explore new areas. These machines will help a lot of different research groups and support our aim to create an agile and flexible Molecular Sciences Research Hub.

“Professor Ed Tate, for example, works on discovering new drug targets in cancer and in drug-resistant infections. He is also working on tackling agricultural pests – the fungi and viruses that attack plants – to ensure food security for our growing population.

“To do this, we need to be able to tell which molecules are important and which drugs or pesticides might be effective against them. This ultimately comes down to identifying and measuring those molecules.

“Agilent’s liquid chromatography mass spectrometers will boost this research, allowing us to measure very small amounts of molecules and to distinguish between even very similar molecules. The performance of these machines is such that we will be able to do work we couldn’t do previously.

“This is a synergistic relationship – Agilent want to remain involved with Imperial to understand what their technology is being used for and how they can help develop the next generation of equipment to meet new scientific challenges.

“These days, research funders expect you to have much of the equipment you need to carry out a study and typically expect an institutional contribution towards instrumentation. Having this high-performance lab equipment makes it that bit easier to attract funding, meaning scientists have more time and resources to spend on cutting-edge research.”

The Molecular Sciences Research Hub will officially open in 2019. For more information, visit imperial.ac.uk/white-city-campus/research/molecular-sciences-hub

“Agilent recognises the important contributions made by university scientific research to solve real-life challenges, from finding new ways to fight cancer, to ensuring the purity of food, to solving major environmental issues. It is an honour for Agilent to support Imperial in building an advanced scientific measurement and analytical laboratory at the new White City Campus. The collaboration further underscores Agilent Technologies’ strong commitment to academia through its academic programmes, breadth of academic research collaborations, and growing network of Agilent Centres of Excellence.”

Mike McMullen
Agilent President and CEO

If you would like to support research in the Faculty of Natural Sciences, please contact Marcus Rees-Roberts, Head of Development, Faculty of Natural Sciences on +44 (0)20 7594 6135 or at m.rees-roberts@imperial.ac.uk
‘Man-made’ earthquakes could be key to predicting the next big event.

Thanks to a generous donation from Dr Neil McMahon, Imperial researchers have a rare opportunity to hunt for earthquake warning signs. Dr Saskia Goes, a geophysicist in the Department of Earth Science and Engineering, explains how she hopes to approach this long-standing challenge.
“I’m really excited to be part of this work because I’ve been interested in earthquakes for a long time. I spent my PhD at the University of California, Santa Cruz, studying the San Andreas Fault. Scientists there have spent 30 years monitoring and waiting for an earthquake but, even when it did come, they didn’t find the warning signs they were looking for.

“The holy grail for earthquake science is forecasting the next big event, so that a life-saving early warning can be issued. But, so far, research hasn’t met our expectations.

“The problem is that earthquakes don’t happen often and there haven’t been many since we began measuring possible warning signs. We don’t have enough data to find a clear pattern or a reliable precursor.

“Interestingly, some human activities can increase the likelihood of an earthquake. For example, artificial lakes created when we build large dams have triggered small earthquakes and occasionally larger ones. There’s also evidence that fracking – extracting natural gas from underground and, in particular, injecting waste water from the process deep into the ground – can trigger earthquake activity.

“The energy industry is monitoring these gas extraction sites and that creates a unique opportunity for earthquake scientists like me because we suddenly have a lot more data. Dr McMahon’s links with industry are helping us to tap into this supply of data and the funding he is providing will allow us to capitalise on this new opportunity.

“At Imperial we have created the Centre for Geohazards and have gathered a diverse team of researchers to bring a new perspective to this long-standing problem. Dr Peter Stafford is a civil engineer, Dr Alex Whittaker is a geologist, my research is in geophysics and we’ll work with data scientists to manage all this new data.

“The donation will fund a three-year project, including a new postdoctoral researcher who will hunt for correlations between the size and location of earthquakes, and changes that can be measured above ground, such as seismic activity, alterations in rock properties and surface deformation. Ultimately, we want to understand the process that leads to an earthquake and thereby increase our ability to forecast them. We might come up with some new ideas of what parameters to test next and, if we’re lucky, we might find some undiscovered earthquake signal.

“This is a rare and amazing opportunity to try something new. It’s not easy to find funding for this type of research – it’s considered too risky because we simply don’t know what we will find. But, like us, Dr McMahon thinks it’s possible to discover something that could forecast and ultimately predict earthquakes. By bringing industry together with a variety of researchers, we might find something new; something no one has seen before.”

“If you would like to support the Faculty of Engineering, please contact Jamal Iqbal, Head of Development, Faculty of Engineering on +44 (0)20 7594 3823 or at jamal.iqbal@imperial.ac.uk

“...I have been interested in earthquakes for a long time and have been frustrated that there has been very limited advance in our ability to predict when they will strike, especially in densely populated areas. Hopefully, by analysing data from the energy industry and using Imperial’s multi-departmental approach to research, this project can move us a little closer to understanding what we should monitor to improve earthquake prediction.”

Dr Neil McMahon
We are
recognising your generosity.

Thank you to everyone who gave so generously to Imperial in 2017–2018. To see so many alumni and friends donating year after year, and to have so many new friends joining them is truly humbling. We are so grateful for your support.

I hope you enjoyed reading about some of the ways your donations are having an impact, both at the College and in our wider community. Whether you’re helping us provide world-class educational opportunities, create new spaces for collaboration and innovation, or develop thoughtful and practical solutions to societal challenges, your support is truly making a difference.

One of the wonderful things about our donor community is that it unites people from across disciplines, across generations and across the world; people who are connected by their passion for science and education, and their commitment to the College. On behalf of everyone at Imperial, let me offer my deepest gratitude for your friendship and support.

Sarah Porter Waterbury
Vice-President (Advancement)
Leadership donors.

£5,000,000 +
Brevan Howard Asset Management LLP and Brevan Howard Partnership Services Limited†‡
Mr Alan E. Howard (Chemical Engineering and Chemical Technology 1986)†
Imperial College Foundation, Inc.†
The Michael Uren Foundation*
Ms Marit Mohn (MSc Chemical Engineering and Chemical Technology 1973)†
Sir Michael L. Uren (Mechanical Engineering and Motive Power 1943)∗
Mr Jon Moulton
Quinbrook Infrastructure Partners
Rio Tinto Plc
La Fondation Sackler
Ms Diana M. Scarrott (MBA Management School 1998)†‡
Mr David Scaysbrook
And one anonymous donor
Kusuma Trust UK
Dr Mike A. Lee (Physics 1957)†
and Mrs Ann Leet†
Lloyd’s Register Foundation, in memory of Dr Ashraf Ben EI-Shanawany
The Lord Leonard and Lady Estelle Wolfson Foundation*
Mais S.P.A
Mr Thomas J. Mather
Dr Neil McMahon
Mr Christopher V. Morgan (Civil Engineering 1978)∗
Nestlé
Nimiq Network Ltd
Mr Chris P. O’Dea (MSc Civil Engineering 1976)
Perenco Holdings
Pfizer Ltd†
The Rayne Trust
Mr Stuart Riley (MSc Physics 2000) and Mrs Joanna Riley
Santander UK plc*
Shell Global Solutions International B.V.†
Shell Petroleum Development Company of Nigeria Ltd (SPDC)
Shell UK Ltd
Swarovski Foundation
Techrete (UK) Ltd
Thermo Fisher Scientific, Inc.*
UBS Optimus Foundation
Vanguard Charitable Endowment Program*
The Wolfson Foundation*
Xi’an Rui Chang Real Estate Development Co., Ltd
Plus 19 anonymous donors

£1,000,000 – £4,999,999
Agilent Technologies LDA UK Limited
The Alexander Mosley Charitable Trust†
Bill & Melinda Gates Foundation
Good Ventures
The Grantham Foundation for the Protection of the Environment∗
JP Moulton Charitable Foundation
Kadoorie Charitable Foundation
Dr Richard Lee (Chemical Engineering 1960, PhD Chemical Engineering and Chemical Technology 1964)† and Mrs Rosalind Lee
The Lees Charitable Foundation Ltd†
The Mohn Westlake Foundation
The Sackler Trust
Silicon Valley Community Foundation
Abu Dhabi School of Management
AXA Research Fund
Mr Babir Bains
Dr Vik Bansal (MEng Chemical Engineering and Chemical Technology 1996, PhD 1999) and Mrs Caroline Bansal
The Berkeley Foundation
The Blue Hills Fund
BP Exploration Operating Company Ltd
The Brian Mercer Charitable Trust
Broadcom Foundation
Mr Saket Burman
Cisco Systems, Inc.
Citigroup, Inc.
Codi-M Ltd
ConocoPhillips (UK) Limited
Elsevier Foundation
Professor Ten Feizi
Fidelity Charitable Gift Fund*
Fondazione Isabella Seràgnoli
Professor Alice P. Gast (President)† and Mr Bradley J. Askins†
The Goldsmiths’ Company†
Google Ireland Limited
The Green Room Charitable Trust
The Helen Hamlyn Trust†‡
The Horne Family Charitable Foundation
Intel Corporation
The James Dyson Foundation*
The Joyce and Norman Freed Charitable Trust
The Kristian Gerhard Jebsen Foundation*

£50,000 – £499,999
Mr William T. Anglesea (Chemical Engineering and Chemical Technology 1962)†
Mr Humphrey W. Battcock†
The Charles Wolfson Charitable Trust
The Children’s Investment Fund Foundation UK (CIFF)
DeepMind Technologies Limited
Google UK Ltd
JP Morgan Chase Foundation

Donor list key
* Given every year for the last five financial years (cash income)
† Given to an endowed fund in either 2017–18 or a previous year
Donors giving in 2017–18

Valued supporters.

£5,000–£49,999

The 3Ts Charitable Trust
Actelion Pharmaceutical UK Limited
Mr Usman Akram (MEng Mechanical Engineering 2003) and Mrs Franziska Akram
Mr Eric Albert*
Allen & Overy LLP, in memory of Steve Roberts
The Amjad & Suha Bseisu Foundation
Armourers & Brasiers’ Company
Mr David Aron (MSc Mineral Resources Engineering 1979)
Artemis Charitable Foundation
Aventus Protocol Foundation
Bank of Montreal
The Barrer and Nichols Charitable Trust
The Ben-Brahim Family Fund
Mr Driss Ben-Brahim
Mr Anders P. Bergendahl
Bonus Media Ltd
Mr Amjad A.N. Bseisu
Dr Richard J. Burkett (Chemical Engineering and Chemical Technology 1970, PhD 1973)* and Ms Marilyn Burkett†
Sir Andrew Cahn
Mr David Cantillon
Cargill Trade & Structured Finance
Cathie Associates
Chelsea Women’s Care Limited

£59.1 million raised for research, education and College priorities in 2017–18.

Chevron Humankind Matching Gift Program
Mr Tse Huong Choo (MEng Computing 1995)
City & Guilds College Association
Mr Bob W. Clayton (Mechanical Engineering 1966)
The Commonwealth Market Inc
The Conny-Maeva Charitable Foundation
Dr Conrad Cotton-Barratt
Mr Calum G. Culver
Mr Ed D. Daniels (MEng Chemical Engineering and Chemical Technology 1988)*
Mr Paddy G.G. Dear (Mineral Resources Engineering 1983)
The Dove Trust
Mr Max R. Duckworth (Physics 1992)* and Mrs Sarah Godlewski
Ede & Ravenscroft Limited†
Emeritus Professor Samuel Elion† and Mrs Hannah Elion
The Enid Linder Foundation
Mr Folker Ernst
Flutterby Fundraisers
Dr Alexander N. Folefac (Mineral Resources Engineering 1983, PhD 1987)†
Ford Motor Company Fund
Ford Motor Company
Friends of Imperial College*
FundApps Ltd
Mr Nigel J. Furmston
Mr Paul D. Garwood (Chemistry 1965) and Mrs Margaret B. Garwood
Mr Julius Gaudio
Geotechnical Consulting Group
C.C. Gibson
The late Sir Tony Gill (Mechanical Engineering 1954)
Goldman Sachs International
Mr George J. Goldsmith
Mr Jahor Gupta (MEng Electrical and Electronic Engineering 1996)*
Mrs Polly M. Haines, in memory of Emeritus Professor Malcolm G. Haines (Physics 1957, PhD 1960)
Dr Alistair D. Hann
Mr Richard P. Harding
Mr John S. Henke (Civil Engineering 1976)

Dr Xudong Jing (PhD Mineral Resources Engineering 1990)†
Mr Ezra Klein
The KrisEllie Charitable Fund
Lady Doris Segrave Will Trust
Ms Anne Lowrey
Dr Arthur L.S. Lui (Westminster Hospital Medical School 1976)
Mrs Sally A. Lykiardopulo
The M J Samuel Charitable Trust
Mr Stephane J.P. Marchand (MEng Materials 1996)
The Mark Leonard Trust
Mr Malcolm J. Matthews (Chemical Engineering and Chemical Technology 1963, MSc 1967)*†
Maxeler Technologies Ltd
Dr Mary Meaney
Mr David Moore
Emeritus Professor Howard Morris and Mrs Maria Morris
Mr Brendan Mortimer

The Imperial 1907 Circle

The Imperial 1907 Circle recognises donors who give £5,000 or more during the College’s financial year and whose philanthropic support plays a leading role in advancing research and education at Imperial. Named after the year in which the College was established by royal charter, the Circle offers its members a commemorative lapel pin and special invitations to College events.
Donors giving in 2017–18

“Collectively, we can tip the scales between students experiencing or missing out on the exceptional Imperial environment.”

Dr Alistair Miller
(PhD Chemical Engineering 1966)
has donated generously to initiatives aimed at improving the student experience.

13,354 alumni
and friends donated to the College this year.
Donors giving in 2017–18

Valued supporters.

£1,000–£4,999

Mr Timothy M. Abbott (MEng Electrical and Electronic Engineering 1998)*
Mr Samer I. Abu Ayash (MSc Civil Engineering 1989)*
Mr Arho Akpe (MBA Imperial College Business School 2010)
Mr Tom Aldred*
Eur Ing Syed M. Ali (Chemical Engineering and Chemical Technology 1977) and Mrs Lynn S. Ali
All Souls College
Ms Violeta M. Alvarez (MEng Civil Engineering 1998)
Mr Tim Andrews
Professor Alan Armstrong (Chemistry 1987, PhD 1990, MBA Imperial College Business School 2016)*
Mrs Juliet C. Armstrong née Kershaw (Geology 1987)*

Arup Group Ltd
Mr Ted S. Awty (Physics 1972)
Mr Vidur Bahree (Mechanical Engineering 1992) and Mrs Anshu Bahree
The late Mr Keith Baines (MSc Mathematics 1974)
Mr Andrew Barber
Ms Amy Barker
Dr Philip J. Bathard-Smith (Charing Cross Hospital Medical School 1974)
Mr Andrew O. Bayode (MBA Management School 2002)
W. Bazant
Bearrem Charitable Trust
Mr Nicholas A. Bartlett
Dr Philip J. Bathard-Smith (Charing Cross Hospital Medical School 1974)
Mr Andrew O. Bayode (MBA Management School 2002)

“I would not be here without the President’s PhD Scholarship. I am very grateful to the donors for their support and I will do my best to exceed Imperial’s high expectations, as well as my own.”

Mathilde Fajardy
President’s Scholar studying for her PhD at the Centre for Environmental Policy and the Centre for Process Systems Engineering.
Imperial this year marked the topping out of the Michael Uren Biomedical Engineering Research Hub, one of the flagship White City Campus buildings. The building, which was made possible by a £40 million gift from Sir Michael Uren and his Foundation, will house life-changing research into new and affordable medical technology. Sir Michael Uren’s sons and representatives from the Foundation joined Imperial staff for an event to celebrate this milestone in the building’s construction.

The Imperial 1851 Circle

The Imperial 1851 Circle honours those donors who make a contribution of between £1,000 and £4,999 during the financial year. By giving at this level, Circle members play a crucial role in shaping the future of Imperial. The Circle is named after Prince Albert’s 1851 vision for a new scientific and cultural quarter in South Kensington, with Imperial College London at its heart. Members receive special recognition in donor listings, invitations to College events and a commemorative lapel pin.

- Mr Charles E. Bowyer (Mathematics 1972)*
- Ms Mary Bright
- Mr Brian J. Broomfield (Civil Engineering 1953)*
- Mr Malcolm A.H. Brown (MSc Geology 1982)
- The Bryan and Sirkka Sanderson Foundation
- Mrs Cynthia D. Buchanan
- Mr Chris D. Burke (MEng Aeronautics 2001)*
- Mr John R. Butler*
- The Calleva Foundation
- Cambridge Students Rag Appeal
- The Carpenters’ Company*
- Dr Davide Casabianca (T.H. Huxley School 2001, PhD 2002)
- Mr Michael Casey
- Dr Rolando Castillo-Muñoz (PhD Mining and Mineral Technology 1972)
- Mr Robert W.N. Cattell (MSc Management Science 1981)
- Mr Kristopher Cawood
- Ms Karen Chamberlain, in memory of Mr Colin Chamberlain
- The Charles Curry Charitable trust
- Mr Bob L.Y. Cheung (MSc Civil Engineering 1973, 1974)
- Mr Martin Churchill
- Dr Andrew P. Clark
- Mr Nigel Clark (Physics 1961)
- Mr Jason P. Clements*
- Emeritus Professor Keith Codling (Physics 1958, PhD 1961)*
- Dr Martin Cole (Botany 1955, PhD Botany and Plant Technology 1958)*
- and Mrs Maureen P. Cole*
- Ms Anne Collett
- Mr Rob Collinge (Electrical Engineering 1968, 1971)*
- Ms Ann Collins (Chemistry 1985, MSc Management Science 1986)
“One of the most rewarding parts of my job is meeting Imperial alumni and supporters and hearing about their connection to the College. It’s a great privilege to hear about people’s memories of their time here, and what inspires them to make a gift. Events like the Imperial College Symphony Orchestra concert are a great opportunity to be involved in Imperial community life.”

Andrew MacKinnon
Development Officer
In July 2018 Imperial announced the launch of “Transforming Health and Wellbeing”, a £100 million fundraising campaign for a new home for the School of Public Health at the White City Campus. Amongst those speaking at the launch event was Professor Neil Alford, Associate Provost (Academic Planning), who presented a computer animated fly through of the interior of the planned School of Public Health building.
Donors giving in 2017–18

Mr Richard Grogan, in memory of Mr Charles W. Grogan
Professor Ignacio E. Grossmann (Chemical Engineering and Chemical Technology 1994)
Dr Roy Gulati (Charing Cross Hospital Medical School 1956)
Professor Syamal P. Gupta (DIC Mechanical Engineering 1965, MPhil 1986) and Mrs Chandra Patel
Mr Carlos Gurdiel
Dr Nicholas A. Hadjiyiannis (MEng Mechanical Engineering 2006)*
Mr Dominic Hall
Hamish & Sophie Forsyth Charitable Trust
Dr George B. Hargreaves (Chemistry 1956, PhD 1958)*
Mr Tom H.W. Harper (Pure and Applied Biology 1986) and Mrs Anna J. Rider-Harper
Ms Abigail Harris
Mr Roy Hayes (Physics 1946, 1947)*
Mr Denis E.P. Hayward (Chemical Engineering and Applied Chemistry 1945)*
Ms Kate Heath
Severin Heiniger
The Helder Fund
Dr Jack G. Helfenstein (Chemical Engineering and Applied Chemistry 1956, DIC Chemical Engineering 1959)*
Heptares Therapeutics Ltd
Mr Nicholas T.W. Heung (MEng Computing 2011)*
Mr James Hewins
Ms Nazia Hirjee
Mr Raphael W. Hodgson (Civil Engineering 1951)
Mr John W.H. Holmes (Electrical Engineering 1958)* and Mrs Gloria Holmes*
Mr Maxim Horwitz
Mr Nigel G. Howard (Physics 1967)*
Miss Doudou Huang (MSc Mathematics 2015)
Dr Anthony A.E. Hunt (PhD Bioengineering 2010) and Mrs Christine I. Peerman
IMC Charitable Foundation
Innovations Consulting Group LLC
Mr Omar Iqbal (MEng Electrical and Electronic Engineering 1998)*
J29 LTD
Dr Nawooroonne W.N. Jayasiri (MSc Mechanical Engineering 1968, PhD Management Science 1977)*
M. Matthew Jessop
Dr Basil L. Joffe (PhD Chemical Engineering and Chemical Technology 1971)
The John S. Cohen Foundation*
Mr Maurice E. Jones (Chemical Engineering and Chemical Technology 1966)
The Jusaca Charitable Trust
Jonas Kaerts

Our 10 collective giving funds touch every aspect of life at Imperial – from enabling research, to enriching the student experience. We are grateful to the 4,719 people who donated more than £1.1 million to these funds.

£253,632 Where Need is Greatest
£266,929 Engineering Dean’s Fund
£60,777 Medicine Dean’s Fund
£46,227 Natural Sciences Dean’s Fund
£29,482 Business School Dean’s Fund
£182,539 Student Hardship Fund
£224,018 President’s Scholarship Fund
£28,630 Imperial Experience Fund
£61,672 Library Fund
£17,424 The Blyth Centre for Music and Arts
Donors giving in 2017–18

“I made a donation to the Student Hardship Fund because I want to support future students and help them on the way to their own graduation day.”

Ahnaf Bin Anesee
(Biotechnology 2017) made his first donation to Imperial on the day of his graduation in summer 2017.
New scholars have the chance to meet and learn more about their scholarships and supporters at the College’s annual briefing event.
Donors giving in 2017–18

150 student callers took part in this year’s telephone campaigns, raising £154,717.

Rege
Mr Elmar Reichmann (MSc Physics 1998)
Dr Georg Rellensmann
Dr Spyros Retsas, in memory of Mrs Diana G. Retsas
Mr Stephen Revess (DIC Civil Engineering 1951)*
Mr Guy Rigby (Civil Engineering 1977)*
Mr Thomas G. Robson (Chemical Engineering and Applied Chemistry 1955)*
Mr John T. Rogers (MEng Electrical Engineering 1991)
Mr Jonathan M. Roney (Biochemistry 1996)†
M.D. Russell
Mr John B. Rutter (Chemical Engineering 1962)*
Mr Muir Sanderson and Mrs Florence Sanderson
Mr Philip M. Savage (DIC Aeronautics 1962, 1966)
Mr John D. Schofield (Metallurgy 1971)*
Mr Neil C. Sharp (Geology 1988)*
Dr Derek Shaw (PhD Meteorology 1953)*
Professor Emeritus Tsung-Ying Shen (DIC Chemistry 1948)
Mr Pawel Sienkowski
The late Mr John G. Simpson (Mechanical Engineering 1962)*
Mr John M. Smith
Dr Bill J. Smyllie (Metallurgy 1946)*
Dr Simon Spiro
Mr Raymond L. Squitieri
SR Design Associates*
Stanhope Plc
Mr Sven Strache
Miss Carri S.T. Swann
R. Swift
Mr David Symonds
Dr Miriam Tao (Charing Cross Hospital Medical School 1984)
Mr Ronald D. Taylor (MSc Civil Engineering 1969)
The Technology Partnership plc
Dr Richard J. Threlfall (Botany and Plant Technology 1954, PhD Botany 1957)*
Tillman Thomson Family Fund
Mr Anthony D.P. Towers (Computing 1986)
Mr Michael J. Trimm (Mathematics 1990)*
Mr Oscar S.M. Tucker (MEng Chemical Engineering 2017)
Mrs Ruth M. Tuke née Edwards (Mechanical Engineering 1977)* and Mr Mike A. Tupe
Mr Phil G. Turner (Chemical Engineering and Chemical Technology 1967)
Unigestion
Mr Mohammad S.U. Usmani (MSc Physics 2011)
Mr John W. Valentine (Chemical Engineering and Chemical Technology 1962) and Mrs Anne M. Valentine
Mrs Teresa M. Van Den Bosch
Mr Luis Vargas
Dr Joseph C. Vickery (Electrical Engineering 1955, PhD 1960)
Dr Bruno J. Vieri (PhD Electrical Engineering 1965)*
Miss Ellen Vitercik
Mr Ted Wachtler
Mr Brian A. Walker (Civil Engineering 1975)*
Mr Graham M. Wallace (Civil Engineering 1969)
Mr Kevin J. Walters (Computing 1993, MSc Electrical and Electronic Engineering 1994)*
Mrs Sarah Porter Waterbury and Dr John Waterbury
Ms Joanna Watts
Dr Rick Weber
Dr Alan G. Weeks (DIC Civil Engineering 1961)
Reverend David G. Weeks
Dr Antony B.T. Werner (Mining 1956)*
Mr Thomas P. Westley (Metallurgy 1973)*
Dr Sun T. Whang (Chemical Engineering and Chemical Technology 1966)*
Mr Simon Watson
Dr Janet White (St Mary’s Hospital Medical School 1975)
Mr Roy L. White (Electrical Engineering 1965)*
Ms Georgina Wilcox
Mr Brian R. Wildy (Chemical Engineering and Chemical Technology 1963, MPhil 1965)*
The William D. Rhodes Foundation
Mr Robert Wilson (Mathematics 1971)*
Ms Alison Winston
Dr Howard E. Wise (Chemical Engineering and Chemical Technology 1963, PhD 1968)*
Mr Richard M. Woldenberg (Chemical Engineering and Chemical Technology 1980)*
Dr J.A. Wood (St Mary’s Hospital Medical School 1966)
The Worshipful Company of Furniture Makers
Mr Cyril M.F. Yap (Electrical Engineering 1971)*
Dr Ka-Ping Yee
Mr Patrick V.C. Yin (Electrical Engineering 1974)* and Mrs Irene P.S. Yin*
Plus 777 anonymous donors

1,150 alumni and friends volunteered their time, helping with events, student mentoring and alumni group committees.
Endowed funds.

Gifts from the following donors of more than £1,000 were endowed before 2017–18 and provide an ongoing source of funding for the College.

Mr Eric Abraham
The Alan Howard Charitable Trust
Mr John M. Alexander (Chemical Engineering and Chemical Technology 1955)
Mr Ken R. Allen (Physics 1959)
Mr Fernando A.D.S. Alves (MSc Mineral Resources Engineering 1982)
Mr Victor Appleby
Arcadia Charitable Trust
ARIA Pharmaceuticals Inc
The Asher Winegarten Memorial Fund
The late Mr Roger D. Bailey
The late Professor Herbert B. Baker
Professor Amiya K. Basu (DIC Civil Engineering 1960, PhD 1964)
The Bawden Fund
Dr Juergen Beckmann
The late Dr Gloria D. Borley (Geology 1960, PhD 1962)
Mr Charles E. Boxer (Chemistry 1963)
BP General Educational Trust
Brevan Howard Partnership Services Limited
British Heart Foundation
The estate of Ms Sharine Brown (Head of Accommodation Services 1988–2010)
Mr Clinton Burhouse (Geology 1968) and Ms Jean Burhouse
The late Mr SL Chen (MSc Electrical Engineering 1952), in memory of Dr Doris Chen
Dr H K Cheng (DIC Civil Engineering 1964)
Mr Robin M.R. Claridge (Mechanical Engineering 1966)
The Charity of Margaret Holligrave via the Clothworkers’ Foundation
CML Consulting Ltd
The estate of Dr Warwick J. Comley (Physics 1959, PhD 1962)
The late Dr Greta B. Cone née Stevenson (PhD Biology 1936)
Mr Stephen J. Crampton (Mechanical Engineering 1982)
The late Miss Joanna S.M. Dannatt
The late Mr John J. Davis (Mechanical Engineering 1951, MSc 1954)
Dawson Hart Solicitors
The late Professor Michael C. De Malherbe (PhD Mechanical Engineering and Motive Power 1945)
Dr Michael Denman (Charing Cross Hospital Medical School 1958) and Dr Evelyn J. Denman, in memory of Dr Philip and Mrs Helen Fialkow
Miss Betty Diacon
The Edmond J. Safra Philanthropic Foundation
Dr Ivor R. Ellul (Mineral Resources Engineering 1988)
Mr Malcolm S. Engwell (Physics 1963, DIC 1964)
Dr Pauly Enwere (PhD Mineral Resources Engineering 1991, 1993, 1994) and Mrs Maryann Enwere
Essex Engineering (Wanstead) Limited
The late Mrs Helen Ette-Park
The late Mrs Ted Finlayson
FoRmicaY Ltd
Foundation Lily Safra
Frank Hodgson Prize Fund
The late Mr Andre Gabor and Mrs Agnes Gabor
Garfield Weston Foundation
Garfield Weston Trust for Research into Heart Surgery
The late Dr Brian J. Gliddon (Chemical Engineering and Applied Chemistry 1956, PhD Chemical Engineering 1959)
Mr John I. Goddard (Chemical Engineering and Chemical Technology 1982)
Dr Amrutha Gopal (Physics 2004)
Dr Sarah V. Graham and Mrs Laura Karran, in memory of Mr Peter M. Fraenkel (Civil Engineering and Surveying 1936)
Mr Bruce Gregory (Chemical Engineering and Chemical Technology 1966)
Mr Peter W. Gregory (Civil Engineering 1958)
Lady Helen Hamlyn
The late Mr Maurice Hancock (Physics 1932, 1933)
The late Mr Charles Hawksley
The Heart Disease and Diabetes Research Trust
Henry Edward Armstrong Memorial Trust
The late Dr Leo Hepner (Chemical Engineering and Applied Chemistry 1952)
Her Majesty’s Treasury with American sponsorship via Counter
The Holly Hill Charitable Trust
Dr John P. Horsey (Physics 1964, PhD 1967)
Mrs Sabine Howard
The Stephen and Anna Hui Fellowship Trust
Imperial College Press
The Joseph Rank Trust
Mr Grant Kafarowski
Mr Derek J. Kingsbury (Electrical Engineering 1946, DIC 1947)† and Mrs Wendy Kingsbury†
The late Mr Stanislawa Kryszek and the late Mrs Evelyn E. Kryszek
The late Mr Denis L. Langford
Mrs Esther Lee Wong
Dr Harry N. Lee (Electrical Engineering 1964)
The Lee Family
Mr Donald F. Leeper (Mathematics 1960, MSc Mechanical Engineering 1966)
The late Mrs Anzella P. Lees
The Lily Safra Hope Foundation
Liver Research Trust
The Márit and Hans Rausing Charitable Foundation
Marit Mohn AS
The late Mr Cyril B. Marrow
The late Miss Margery McDermott (Mathematics and Mechanics 1951, 1952)
The late Mrs Anzella P. Lees
The Lily Safra Hope Foundation
Liver Research Trust
The Márit and Hans Rausing Charitable Foundation
Marit Mohn AS
The late Mr Cyril B. Marrow
The late Miss Margery McDermott (Mathematics and Mechanics 1951, 1952)
The late Mrs Anzella P. Lees
The Lily Safra Hope Foundation
Liver Research Trust
The Márit and Hans Rausing Charitable Foundation
Marit Mohn AS
The late Mr Cyril B. Marrow
The late Miss Margery McDermott (Mathematics and Mechanics 1951, 1952)
The late Mrs Anzella P. Lees
The Lily Safra Hope Foundation
Liver Research Trust
The Márit and Hans Rausing Charitable Foundation
Marit Mohn AS
Donors giving in 2017–18

Nirmal Sethia Charitable Trust
Mr Muhammad Nomsan
Mrs Maria H. O’Donoghue
Old Centralians Trust
The late Mr David W.R. Price (Chemical Engineering and Applied Chemistry 1951)
Dr Norman E. Price (Physics 1964)
The late Mr Walter T. Prideaux
Miss Mary E. Pugh (DIC Geology 1967)
Professor Hans Rausing
Dr Lisbet Rausing
Ms Sigrid Rausing
Mr Rod D. Rhys Jones (Civil Engineering 1964) and Mrs Sandi Rhys Jones
The Robert Gavron Charitable Trust
Sir Simon M. Robertson
Mr Peter Rolfe (Electrical Engineering 1964) and Mrs Marylyn Rolfe
Mr David Rott
Royal Society of Chemistry
Emeritus Professor Henry S. Rzepa (Chemistry 1971, PhD 1974)
Mrs Lily Safra
The late Ms Anne N. Seagrim
The Sigrid Rausing Trust
The Sir Leon Bagrit Memorial Trust
Mrs Ruth Steele and the late Professor Brian C.H. Steele (PhD Metallurgy 1965)
Stichting Shell Research SSR
The late Dr Alex P. Stoker (Charing Cross and Westminster Medical School 1994, School of Medicine 1998) and Dodd Lewis Solicitors
Mrs Anna T. Stoker
Mr John M. Stoker and Dr Alan Stoker
Dr John Sunderland (Physics 1964) and Mrs Patricia E. Sunderland
Dr Gary A. Tanaka (MPhil Mathematics 1966, PhD 1970)
The late Dr Jean A. Thomas (St Mary’s Hospital Medical School 1970)
The Val O’Donoghue Charitable Trust
Mrs Jean M. Warner, in memory of Mr Francis J. Warner (Mathematics and Mechanics 1954)
Dr Meredith Watts and the late Mr Ian F. Watts (Physics 2000)
The late Mr Allen H. Weaving (Electrical Engineering 1948)
The late Mrs Joan Weaving
Dr Bill G. Welland (MSc Materials 1996)
The late Mr Robert H. Winter
Professor Eugene Wong
Plus six anonymous donors

“Words cannot express how helpful this scholarship was to me, as it really provided me with the financial support that I needed. I hope that donors are aware of their immeasurable contribution to our successes and that they will continue to support students like me in the future.”

Wan Wei Ang
President’s Scholar studying Medicine
Imperial College London is honoured to have received legacy gifts from the following estates during 2017–18.

The estate of Mr Robert E. Borland (Physics 1958, 1960)
The estate of Dr Gloria D. Borley (Geology 1960, PhD 1962)
The estate of Mr John H. Collins (Physics 1959, MSc 1961)
The estate of Dr Myrtle J. Fahmy
The estate of Dr Brian J. Gliddon (Chemical Engineering and Applied Chemistry 1956, PhD Chemical Engineering 1959)
The estate of Ms Veronica L. Hake
The estate of Miss Betty N. Matson (Wye College 1943)
The estate of Miss Margery McDermott (Mathematics and Mechanics 1951, 1952)
The estate of Mrs Margaret McKissock
The estate of Dr Edmund S. Paice (Chemistry 1934, PhD 1936)
The estate of Mr Alan W. Patrick (Metallurgy 1952, MSc Mechanical Engineering 1971)
The estate of Vassilios Sarafis
The estate of Mr Roger C. Thornton (Physics 1959, DIC 1960)
The estate of Mr Michael J. Ward (Botany 1956)

Over 50 supporters joined the Queen’s Tower Society, which now brings together over 300 friends who have made the very special decision to remember Imperial in their will.

A special afternoon tea in the newly refurbished library of the Dyson School of Design Engineering provided an opportunity for alumni and friends of the College to learn more about leaving a gift to Imperial in their will. The event, which was hosted by Professor Nigel Brandon, Dean of the Faculty of Engineering, focused on the importance of legacy gifts to Imperial’s mission and highlighted sources of support for people considering a legacy gift.
Legacy pledgers.

We are grateful to all those who have pledged to remember the College in their will during 2017–18.

Donors giving in 2017–18

Eur Ing Syed M. Ali (Chemical Engineering and Chemical Technology 1977) and Mrs Lynn S. Ali
Mr Fokion Angelopoulos (MSc Electrical Engineering 1986)
Mr Gregory Artus
Dr Rosni Beeharry (St Mary's Hospital Medical School 1996)
Mr Francesco Cannonito (Electrical and Electronic Engineering 2013)
Mr Monty E. Clarkson (Physics 1944)
Mr Richard W.B. Coley (Wye College 1959)
Mr Mark Cresswell (Mining and Mineral Technology 1977, MSc Mineral Resources Engineering 1984)
Dr Colin P. Crosby (St Mary's Hospital Medical School 1979)
Mr Cerith Davies (Physics 1987)
Dr John A. Denholm (MSc Mechanical Engineering 1965)
Mr Pu Duan (MSc Mechanical Engineering 2009)
Mr John Dyment (Chemical Engineering and Applied Chemistry 1954)
Mr Timothy J. Frain (Physics 1977) and Mr Nigel Johnson
Dr Mirko Grljusic (MSc Mechanical Engineering 1976)
Dr Patrick P.N. Haxell (Chemistry 1968, DIC Chemical Engineering and Chemical Technology 1969, PhD 1971)
Mr Charles A. Heckscher (Chemical Engineering and Chemical Technology 1964)
Mr Roger Hiley
Mr Graham T.Q. Hoare (Mathematics 1958)
Engineer Adrian O. Ikeji (Civil and Environmental Engineering 2009)
Mr Roger E. Jones (Electrical Engineering 1962, MPhil 1965)
Dr Christodoulos Keliris (MSc Imperial College Business School 2008)
Miss Yiqiao Liu (Materials 2014)
Dr Keith J. McKee (St Mary's Hospital Medical School 1964)
Mr John A. Melling (Civil Engineering 1957, DIC 1962)
Mr Dionyssios T. Mylonas (MBA Management School 1992)
Dr Masanao Nomura (MBA Imperial College Business School 2007)
Mr Meherzad Pahlan (MSc Physics 2007)
Dr George S. Perry (PhD Chemistry 1959)
Mr Anthony D. Read (MPhil Mining and Mineral Technology 1967) and Ms Rosemary Read
Dr John P. Ryan (Physics 1974, PhD 1978) and Ms Mary L. Jepsen
Mr Hidetoshi Soga (MSc Imperial College Business School 1995)
Ms Fiona A. Stein née Cohen (Chemical Engineering and Chemical Technology 1978)
Mrs Muriel Stocker
Mr Ugur Tanriverdi (MRes Bioengineering 2017)
Miss Melis Tigrak (MSc Imperial College Business School 2008)
Mr Mohan Varma
Mr Tim Wadsworth (Mechanical Engineering 1960)
Dr Theodore G.G. Wilson (PhD Chemistry 1952)
Mr Oliver E. Woolley (MBA Management School 1992) and Mrs Celia Dacombe
Dr Menachem S. Zucker (PhD Electrical Engineering 1990)
Plus 12 anonymous donors

“I've had some lucky breaks in life and one of the luckiest was to be able to attend Imperial College Business School for an Executive MBA and then to be made redundant from my job in the middle of the degree. Thanks to my studies I felt confident enough to have a go at starting my own business. With a lot of hard work and a few more lucky breaks along the way, our business grew and I was able to create security and wealth for myself and my family that I never would have achieved as an employee. I am honoured and privileged to be able to contribute to someone else's lucky break by leaving a portion of my estate to Imperial College London.”

Amy Le Coz
(MBA DIC Management 2004)