

Imperial College
London

ANNUAL REPORT AND ACCOUNTS

2022-23





Front cover: A Medical Biosciences undergraduate practices essential skills in the chemical kitchen, where students use culinary practice as a non-threatening parallel to laboratory work. This page: A new boiler is installed as part of the decarbonisation of the South Kensington Campus, where the heating network is being updated.

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Imperial students walking across the Queen's Lawn and Dangoor Plaza at the South Kensington Campus.



IMPERIAL IN
2022–2023

President's foreword

My first year at Imperial has been truly inspirational and I'm proud to be leading one of the best universities in the world. Imperial's star is rising with great momentum, and we have a powerful story to tell the world.



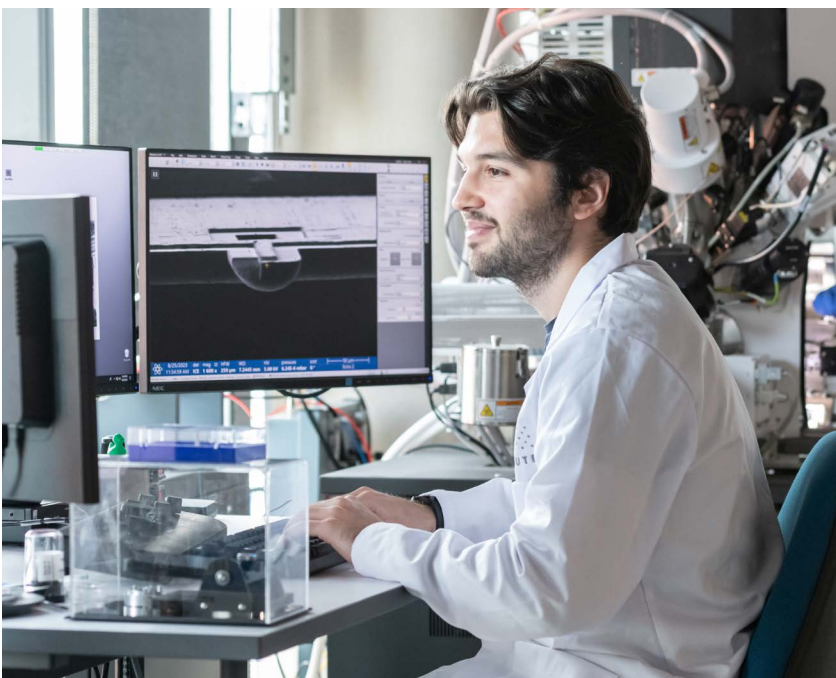
Professor Hugh Brady
President of Imperial
College London

It's been a busy year in the best possible way. I have thoroughly enjoyed learning more about our community's passions through visiting departments, holding In Conversation with the President events and over more informal suppers. I've shared in the excitement of our students as they start their academic journeys and as they graduate ready for their careers. I've been immersed in the collaborative research across departments and showcased new initiatives such as the new Medical School in partnership with the University of Cumbria, our sixth form Maths School for the next generation of STEM students, and the I-X initiative to tackle global challenges with artificial intelligence and data science. I've met with our alumni around the world and enjoyed strengthening our partnerships with our peer universities, industry partners, the UN and other like-minded organisations.

I've been impressed by Imperial's convening power and impact across a multitude of disciplines. Most recently this has paid dividends as part of a collective sectoral effort to persuade the UK Government to associate with Horizon Europe – putting the UK back at the heart of the world's largest transnational research and innovation ecosystem. Thanks to the spirit of innovation that runs through everything we do, Imperial's community is making key contributions towards tackling the world's biggest challenges.

Reflecting on the year covered by this Annual Report, it's clear that we have a lot to be proud of. Imperial has been ranked 8th in the world in the Times Higher Education world rankings, complementing our top 10 place in the QS World University Rankings, and was awarded Gold in the Teaching Excellence Framework. These accolades are testament to the commitment, determination, and ambition of our entire community to make the world a better place.

I simply can't cover the full range of significant milestones and achievements in this year's report, but they include sending Imperial kit on a space mission to assess the habitability of Jupiter's moons, sharing pioneering technology to support the world's first net zero flight, Imperial graduates winning the Prince of Wales' Earthshot prize and the opening of the state-of-the-art Royce facility for future-facing materials. These are all shining examples of the quality of our education and research, and I hope you enjoy reading more in this report. They were delivered through the collective efforts of our brilliant Imperial community and my thanks go to all those involved.



A researcher working in the Royce facility at the Uren Building on the White City Campus.



Together we have also made great strides towards making Imperial an enjoyable, inclusive and supportive place to work and study. With our new Mental Health and Wellbeing Strategy we have committed to nurturing a culture of compassion, care and belonging where everyone gets the help they need, when they need it. We've also renamed our central library as the Abdus Salam Library to celebrate the legacy of inspirational Imperial people from our past and to inspire our future leaders. There is still much work to be done, but these are positive steps in the right direction.

While Imperial's recent performance has been outstanding, we are not resting on our laurels. In our last annual report, I shared that we will be taking a fresh look at Imperial's Strategy and our ambition for the next two decades. As part of this we will also work to strengthen Imperial's brand and share Imperial's story even more

effectively with the world to persuade others to join us, partner with us and invest in us. I'm delighted that so many of Imperial's global community have engaged with our strategy review to-date. We hope to announce our new plans to the world during the first quarter of 2024. Our overarching ambition is to build on Imperial's past achievement and impressive current international positioning and realise our full potential as a force for good in the UK and wider world.

Professor Hugh Brady
President of Imperial College London

Students at South
Kensington Campus.

Imperial's mission, strategy and vision



Our mission is to achieve enduring excellence in research and education in science, engineering, medicine and business for the benefit of society.

High-quality transdisciplinary research, a world-class educational experience and a strong emphasis on academic success and societal impact are the foundations we commit to in our work.

These commitments link directly to our Academic Strategy, which sets out our ambition to deliver transformative impact for benefit on a global scale through four societal themes of health, smart, sustainability and resilience. It also sets out our vision for a student experience that prepares our students to be leaders, to innovate and drive change. Our work to achieve these ambitions is at the heart of everything we do.

In 2022–23 we have been working on shaping our vision and ambition for Imperial over the next decade, through consultation on a new University-wide

strategy. The development of the new strategy was announced in the President's inaugural address in October 2022, where President Hugh Brady said: "It is precisely because of the recent tectonic shift in our world that it is an opportune time to take a fresh look at Imperial's strategy."

The new strategy is being formed through consultation with staff, students, alumni and external stakeholders, whose feedback is helping to address fundamental questions about our academic mission, overall vision and core pillars.

Alongside this work, we began a project to strengthen Imperial's brand – which will sit at the heart of the ambition and vision set out through our new institutional strategy.

Our contribution and impact

Imperial continues to push the frontiers in world-leading research, life-changing education and transformative innovation. Our work throughout 2022–23 has had a real-world impact across the globe – from international partnerships and scholarships to research projects and studies seeking to answer questions about worldwide issues, such as climate change and diseases.

Our staff, students, alumni and partners endeavour to make the world healthier, smarter, safer, more prosperous and more sustainable, and this has been rewarded with the reaffirmation of Imperial as one of the world’s leading universities.

Announced in July 2023, Imperial was ranked sixth top university in the world in the QS World University Rankings for 2024. This puts Imperial at third in the UK and top in London. For 2024, the QS Rankings introduced new methodologies and metrics including ‘Sustainability’ and ‘International Research Network’. These are already key areas for Imperial and evidenced throughout our work in 2022–23, such as through the strategic relationship between Imperial and the University of Tokyo for cleantech and energy research, and the recent partnership with Cornell University to cooperate on using AI to accelerate scientific discovery and future technologies.

Imperial was also placed among the world’s top 10 universities in The Times Higher Education World University Rankings 2023 and was named University of the Year by the Guardian University Guide 2023.

These results follow an increased student satisfaction rate in the National Student Survey 2023, which puts Imperial first among fellow London Russell Group universities. Imperial also placed second among all Russell Group institutions nationally for teaching, with results showing that satisfaction levels have increased in a variety of areas including student voice, learning opportunities, academic support and learning resources.

Retention of our overall gold rating, the highest category, through the Office for Students Teaching Excellence Framework (TEF) in September 2023 reflects the quality of our teaching.

Students and staff sit in parklets on the White City Campus. These parklets feature pitched sedum roofs, timber pergolas and plants to attract pollinators.



People



We aim to build a supportive, diverse and highly motivated staff community that will help us to retain talent.

We recognise that the rising cost of living is having an impact on many Imperial students and staff and we give careful thought on how we can offer help where it is most needed. At Imperial, we use benchmarks to help inform the overall remuneration package that staff receive. When it comes to benchmarking, we aim to pay in the median-to-upper quartile compared with those we're benchmarking against.

Our staff are working to enhance our students' experience and foster a secure, communal environment. Through building strong relationships with our alumni and friends, we maintain a mutually beneficial exchange of ideas and provide extra support for research undertaken by our staff.

Achieving true equality, diversity and inclusion across our staff and student communities is a challenge we continue to face, and we have a way to go. Our drive to achieve this is reflected in activities such as our Shifting the Lens series celebrating diversity at Imperial and development programmes such as Imperial Positive About the Cultural Talent (IMPACT) course supporting staff from Black, Asian and minority ethnic backgrounds and the Calibre course supporting staff identifying as neurodiverse, disabled or with long term physical or mental health conditions.

2022–23 in focus

Promoting positive mental health and wellbeing

Good mental health and wellbeing are crucial for everyone at Imperial and we are focused on working together to create a mentally healthy environment for our whole community.

Our new Mental Health and Wellbeing Strategy was launched in June 2023, outlining our goals for creating an inclusive, respectful and compassionate environment that supports our students and staff in their work and study.

This strategy, developed in collaboration with students and staff across Imperial College London and Imperial College Union, sets out our ambition to create a mentally healthy environment where everyone can reach their full potential.



Graduating with an IMPACT

Imperial’s flagship development programme for minority ethnic staff, Imperial Positive About Cultural Talent (IMPACT), has seen another cohort graduate.

This programme aims to increase confidence and raise career aspirations and in 2022, 16 staff took part. Delegates took part in a series of training courses, workshops and mentoring over the course of four months.

“For me, joining IMPACT was a chance to build my confidence professionally, and hear the experiences of others. I had expectations that I would gain new skills, meet new people and overall, I’ve had a really positive experience.”

Eno Umoh, IMPACT 2023 graduate and Scientific Coordinator, School of Public Health



Above: A participant on the IMPACT programme, Imperial’s talent development programme for Black, Asian and Minority Ethnic staff.

Left: A Mental Health First Aider speaks with a member of staff. Mental Health First Aiders are trained staff who can support in a mental health crisis before professional help is obtained.

2022–23 in focus

Abdus Salam Library

The Central Library was named the Abdus Salam Library in honour of the Nobel prize-winning physicist. The library was named after Professor Salam as part of the University Management Board's response to the History Group's report, commissioned to examine the University's history as linked to the British Empire.

“Throughout his career, Abdus Salam made a tremendous contribution to Imperial, as well as to the world of physics and science more generally. It is right that we do more to celebrate this legacy.”

President Hugh Brady

Abdus Salam Library





Keeping Imperial moving

Imperial launched its Physical Activity and Sport Strategy, outlining a plan to empower students and staff to prioritise physical wellbeing.

The strategy’s vision is to make every member of Imperial’s community more active, and builds on Imperial’s strong national performance, which has seen the University ranked as 17th best institution for competitive sport in the UK. The main goal of the strategy is to enable every member of the Imperial community to meet the national recommendation of 150 minutes of physical activity per week.

Success of the highest Calibre

This year we celebrated the tenth cohort of our Calibre talent development programme.

The programme is for staff who identify as neurodiverse or disabled, or who have a long-term physical or mental health condition. Calibre is designed to address the distinct and often subtle barriers disabled staff face in the workplace.

The programme has been developed and is delivered by Dr Ossie Stuart, an international disability consultant and academic, in partnership with Imperial’s Equality, Diversity and Inclusion Centre.

Above: Players from Imperial College and Imperial Medics face off in the 2023 edition of Imperial’s annual Varsity.

Partners



Through its partnerships, Imperial strengthens its research and education collaboration, and helps to inform decision-makers to influence policy.

We also work with industry to translate innovative ideas into real-world benefits and share the wonder and importance of what we do with the public, schools and local communities.

This year, Imperial has continued to grow and sustain its local, national and global connections and collaborations with business, academia, non-profit, healthcare and government institutions. We have deepened global links, from laboratories to scholarships, and continued to showcase international collaboration in education.

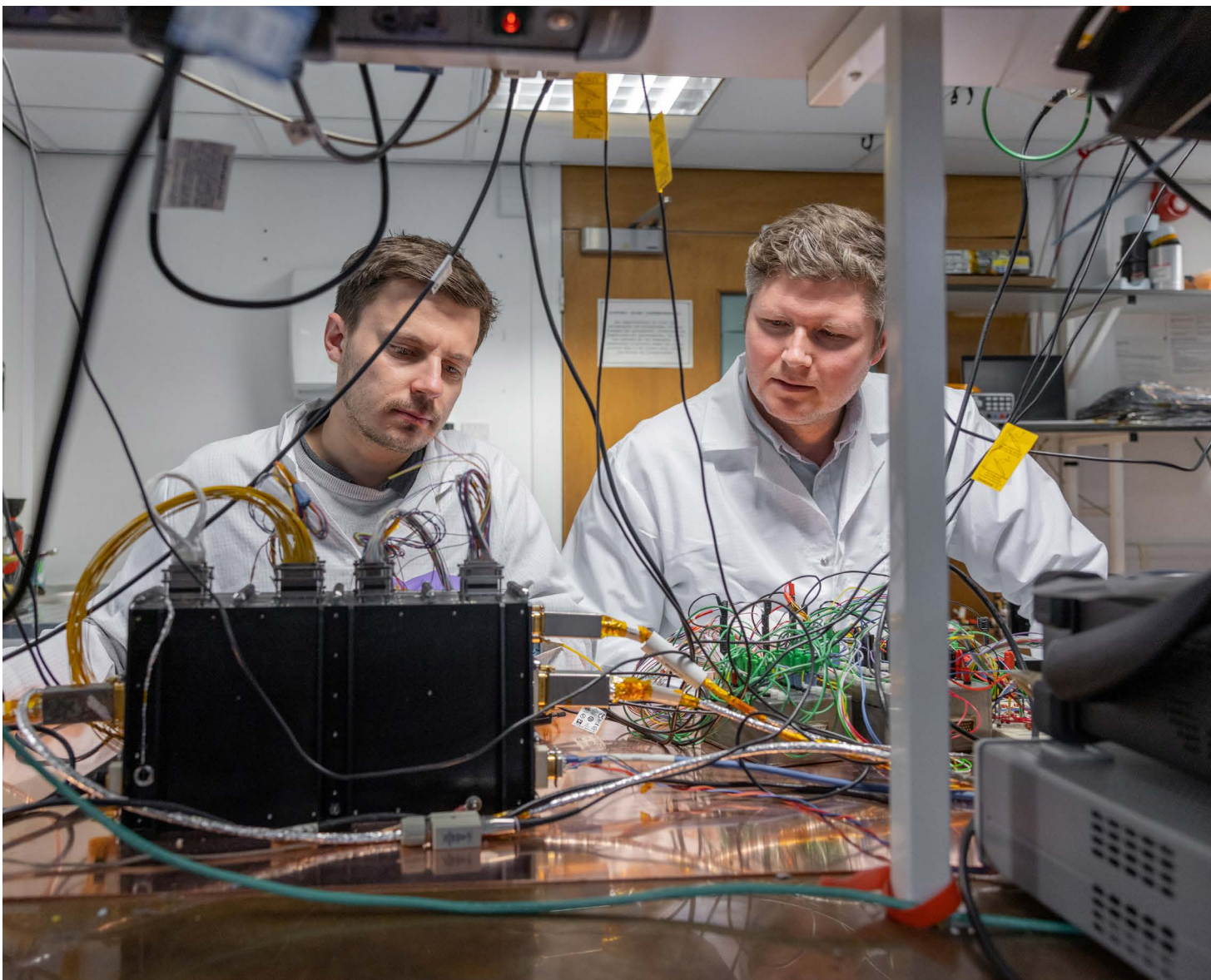
2022–23 in focus

Imperial-built kit on board space mission

The Jupiter Icy Moons Explorer (JUICE) successfully launched, carrying Imperial kit on a mission to assess the habitability of Jupiter’s moons.

Working with nine other instruments, the Imperial-led technology – the J-MAG magnetometer instrument – will help to characterise Jupiter’s environment and three of its largest moons. During the mission, the team are also partnering with the University of Leicester, who are responsible for radiation analysis, and Kyoto University, Japan, who will support the in-flight calibration of J-MAG.

Scientists work on experiments ahead of the launch of JUICE in March 2023.



2022–23 in focus



Grant award for Imperial-led National Wind Tunnel Facility

Imperial will be leading a new network of world-leading university wind tunnels, with the help of funding from UK Research and Investment.

The National Wind Tunnel Facility will see the creation of 11 wind tunnels, an experimental database and upgrades to existing facilities. Imperial will receive £2.9m from the £23m fund to host the Wind Tunnel Facility Hub and establish new facilities.

Transatlantic AI partnerships

Imperial and Cornell University have formed a new partnership to cooperate on using AI to accelerate scientific discovery and future technologies.

The partnership will create a bridge between world-leading AI centres in London and New York to revolutionise the way scientists carry out research and solve the world's biggest challenges.

Imperial and Cornell will work together to explore ways the technology could be used in scientific and engineering research to improve analysis, increase automation and ultimately lead to faster scientific discoveries.

Above: The Department of Aeronautics researching the interpersonal transmission risk of COVID-19 during outdoor exercise in the 10x5 wind tunnel.





Future-facing materials facility launched at White City

Imperial's new Royce facility launched at our White City Campus in March 2023. The facility offers state-of-the-art equipment to support research on advanced materials.

Supported by the Henry Royce Institute, the facility forms part of the Royce 'Atoms to Devices' theme and will deliver innovation at every stage of fabrication, taking advanced materials from their building-block atoms to fully functional devices. The work will generate new materials for quantum technologies, materials for the energy transition, healthcare and information technologies.

Activities at the Royce facility will be supported over the next five years by funding from the UK government. Imperial will receive around £500,000 per year to support research and innovation in advanced materials, such as biomaterials, smart materials and nano-engineered materials.

Societal Impact



Our world-leading researchers play a vital role in addressing society's most pressing challenges – from discoveries in the health sector to developments in future-focused technologies.

Imperial research is defined by its global reach, groundbreaking discoveries, and positive impact on the world. We are proud to have a greater proportion of world-leading research than any other UK university, as published in the Research Excellence Framework 2021.

We continue to encourage the development of brave ideas to manage future challenges and respond to new opportunities through both discovery-led research and the translation of that work into tangible benefits for society.

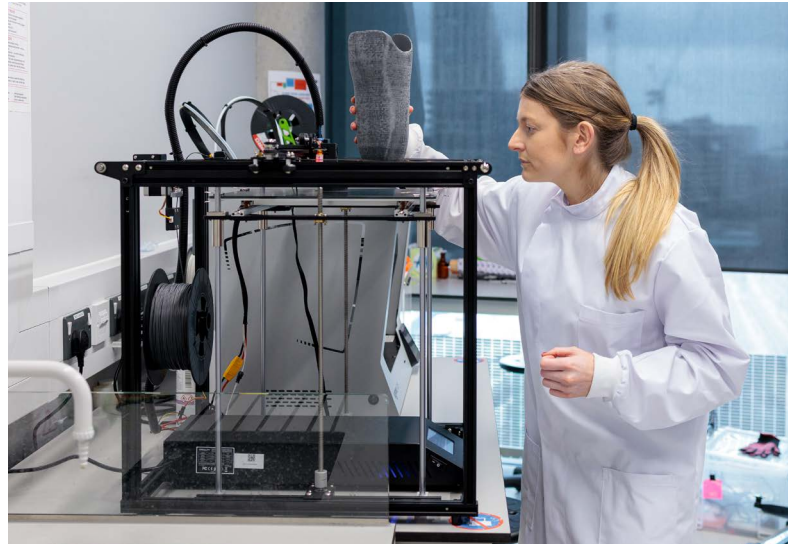
2022–23 in focus

Healthy Society

Launch of Centre for Paediatric Blast Injuries Studies

In May 2023, Imperial joined with Save the Children to launch the world’s first centre dedicated to studying and providing lifesaving innovations to children injured by explosive weapons.

The new Centre for Paediatric Blast Injuries Studies brings together medics, engineers, pain specialists, operational humanitarians and prosthetics and rehabilitation experts who are driving research and innovations to meet the clinical needs of children with blast injuries.



Imperial hosts joint dementia symposium

Experts from across Imperial came together in June 2023, to discuss the latest research progress in vascular dementia, the second most common type of dementia after Alzheimer’s.

Jointly hosted by the British Heart Foundation Centre for Research Excellence and the UK Dementia Research Institute Centre at Imperial, the symposium brought together experts to discuss emerging insights into vascular dementia care and treatment.

Four experimental research projects to improve diagnosis of Alzheimer’s disease and explore new avenues for treatment, are also being driven forward with the support of a £7.5m gift from the Michael Uren Foundation.

Above: A researcher in the Centre for Blast Injury Studies.

Left: Researchers in the Living Lab facility at the Dementia Research Institute in the Sir Michael Uren Hub in White City.

2022–23 in focus

Healthy Society

Humans of Health Research exhibition

Imperial College Academic Health Science Centre (AHSC) brought its photography exhibition to the White City community and its partners earlier this year.

Humans of Health Research is a series aiming to showcase the value and impact of health research. It features photography and interviews with researchers who discuss why they carry out research, what they've learned, and advice for future researchers. Patients are also featured in the series and talk about why they got involved in research and how taking part has affected their health and their life.

The images have since been donated to participating hospitals where they will be displayed on the walls for staff, patients and visitors.

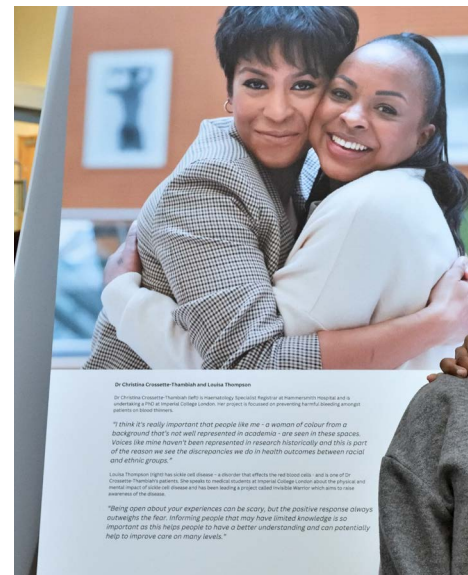
Students engage the public

Students taking part in this year's Public Engagement Horizons module collaborated with WellHome–West London Healthy Home and Environment Study to create activities to explore health impacts of pollutants inside our homes.

This highly interactive module encourages students to reflect on their role and responsibility as future STEM professionals to engage with broader audiences. They applied their learning and projects to engage visitors at public engagement events including Imperial Lates.

"It was new and interesting trying to adapt our skills from talking to Imperial students to then talking to small children and getting them excited about science."

Janushana Sutharsan, Participant and Faculty of Medicine undergraduate student



Above: Louisa Thompson and Dr Christina Crossette-Thambiah at the Humans of Health Research Exhibition. They worked together on Invisible Warrior, raising awareness of sickle cell disease. Left: An attendee at the Humans of Health Research exhibition.



Smart Society

White City Campus launch of AI initiative

Imperial's major new initiative I-X launched in February 2023 at White City.

The initiative is housed over two floors at the Translation and Innovation Hub and brings together over 300 researchers from the Faculties of Engineering, Natural Sciences, and Medicine, as well as Imperial College Business School, working with industrial partners.

I-X will use AI and data science to tackle global challenges by bringing together multidisciplinary academic teams from across Imperial with companies and non-profit labs. Its projects include developing computational tools for improving image-based detection and diagnosis of disease, using AI to direct the design and implementation of new biological systems, and intelligent systems and networks for monitoring, control, and security of critical infrastructure.

Cloud computing of tomorrow

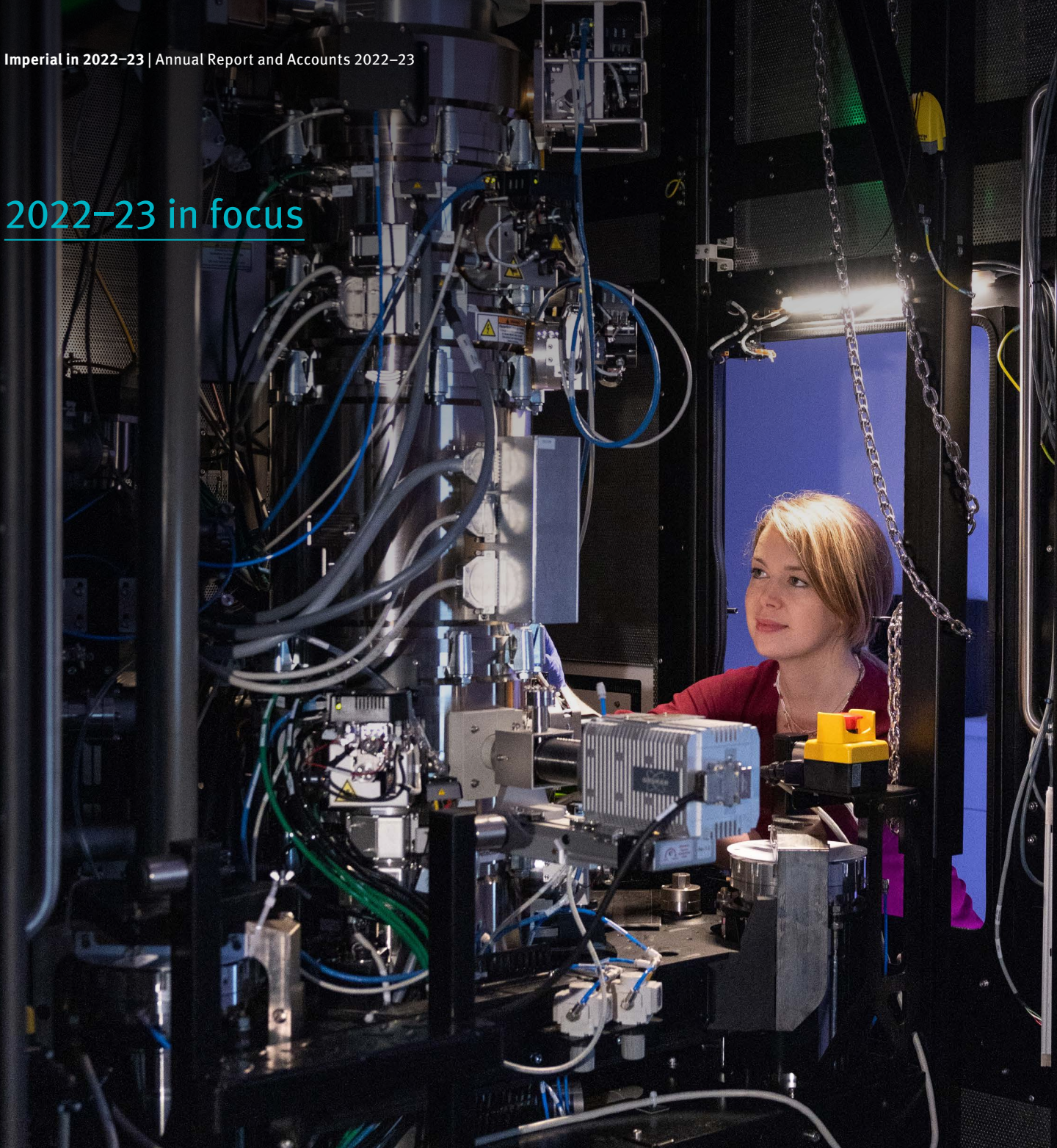
The digital revolution will transform all aspects of society and here at Imperial, we are planning for this future.

A new initiative, known as Communications Hub for Empowering Distributed Cloud Computing Applications and Research, will bring researchers together to drive innovations in cloud computing systems.

The hub will be launched at Imperial with £2m funding from the Engineering and Physical Sciences Research Council, as part of a wider £6m investment into the technologies of tomorrow.

Above: Professor Hugh Brady speaks at the Launch of I-X at the I-HUB, White City.

2022–23 in focus



Smart Society

The QuEST for quantum technology

Imperial has launched a new QuEST (Centre for Quantum Engineering, Science and Technology) initiative to bring together world-leading experts in quantum science and engineering to develop technologies of the future.

QuEST will help ensure discoveries in quantum science become transformative technologies that benefit society – from quantum ‘compasses’ that could allow navigation without satellites, to creating supercomputers, and developing new algorithms for finance.



Main picture:
Dr Shelly Conroy
working on the
Spectra 300
Scanning
Transmission
Electron
Microscope in the
Department of
Materials.
Left: Lord William
Hague at the
launch of QuEST

Sustainable Society



World's first net zero flight

Imperial has continued its research to pioneer breakthroughs and technologies to support the aviation industry's transition to zero pollution – with work on the world's first net zero flight.

Researchers have been working with partners to launch the world's first transatlantic flight powered solely by sustainable aviation fuel. The passenger flight from London to New York will be fuelled by 100 per cent sustainable aviation fuel, combined with carbon removal through biochar credits – a material that traps and stores carbon taken from the atmosphere. The initiative is funded by the UK government's Department for Transport.

Sharing insights on decarbonising buildings

Researchers from Imperial have been sharing valuable insights with climate change and policy experts through the *Decarbonising Buildings: Insight from across Europe* paper published by the Grantham Institute – Climate Change and the Environment at Imperial.

The report's authors say that the UK's efforts to upgrade homes to combat energy bills and climate change are trailing behind Europe, sharing learnings to demonstrate how the UK could decarbonise and increase the energy efficiency of its buildings.

Professor Mimi Hii in Imperial's Department of Chemistry has been working to advance work in flow chemistry, automation and data science.

Developing modern chemical manufacturing methods

A major consortium, led by Imperial and chemical company BASF, is pooling expertise to advance flow chemistry, to make chemical manufacturing more efficient, resilient, and sustainable.

The consortium will pool expertise to advance flow chemistry, a production technique in which the required reactions take place in continuous operation rather than in batches. Flow chemistry allows manufacturers to produce more consistent products, use energy and materials more efficiently, and introduce greater automation.



2022–23 in focus

Resilient Society

3D printing drones to build and repair structures

Imperial researchers and Empa (the Swiss Federal Laboratories for Materials Science and Technology) have created a fleet of bee-inspired flying 3D printers for building and repairing structures in-flight.

3D printing is gaining momentum in the construction industry. Both on-site and in the factory, static and mobile robots print materials for use in construction projects, such as steel and concrete structures.

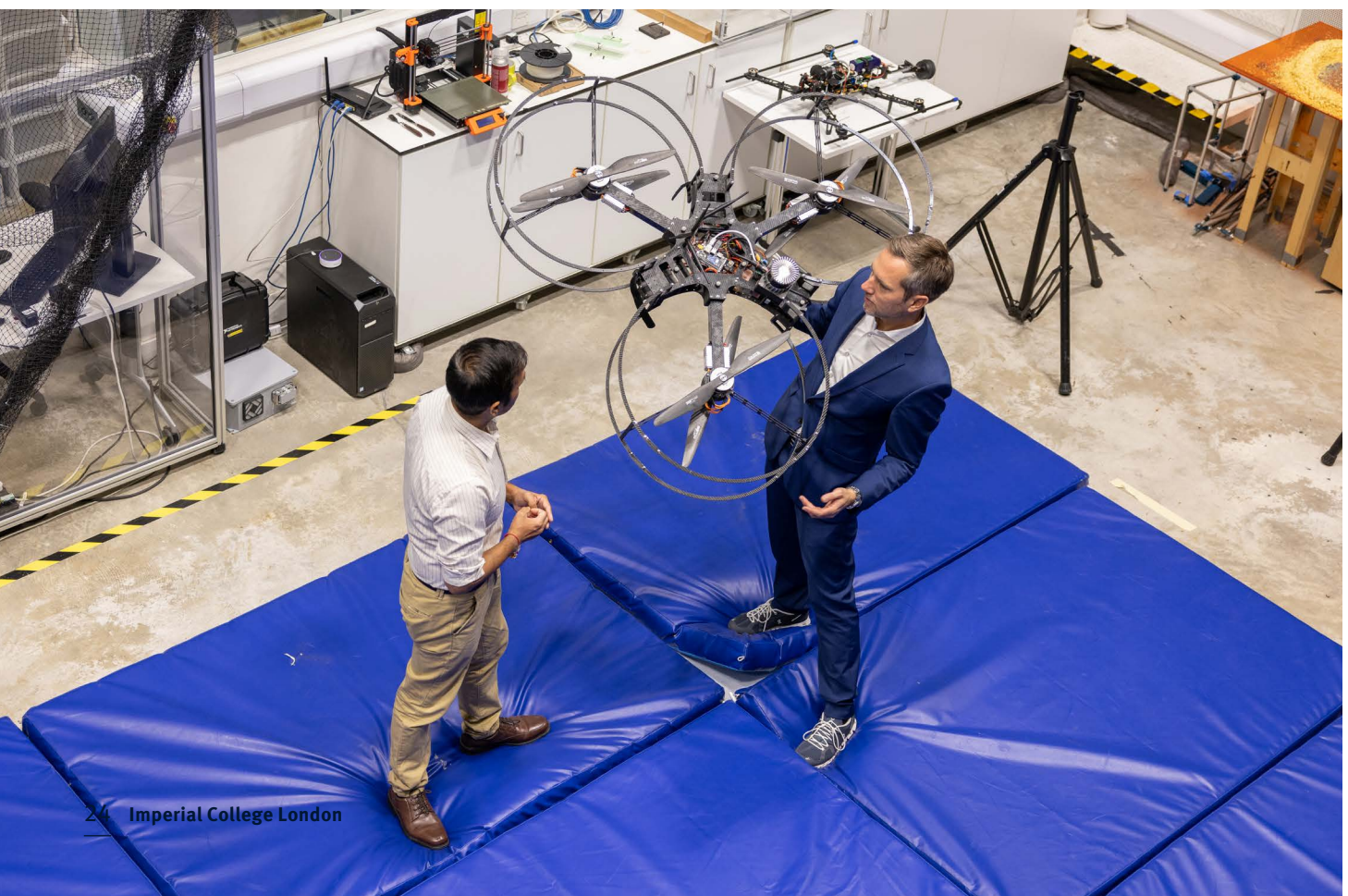
The technology could ultimately be used for manufacturing and building in difficult-to-access or dangerous locations such as tall buildings or help with post-disaster relief construction.

Imperial and UN leaders to tackle development challenges

Global issues such as health, climate and food security were on the agenda when Imperial's President, Professor Hugh Brady and Vice Provost (Research and Enterprise) Professor Mary Ryan, met with UN officials in New York this year. They discussed how science and technology can contribute to these major issues.

Imperial also has an ongoing official consultative role with the UN after being awarded consultative status at the UN Economic and Social Council (ECOSOC). The new status will see Imperial's community closely engage with ECOSOC to contribute towards policymaking, hold joint events with the UN, and advance the Sustainable Development Goals through research and collaboration.

Below: Professor Mirko Kovac (right), Professor in Aerial Robotics, testing drones in the lab.





Cyclone data on smartphones

Imperial researchers, partnered with Vodafone Foundation, are using the computing power of millions of smartphones to crunch data about cyclones.

Researchers at the Grantham Institute – Climate Change and Environment will run thousands of models of cyclones across the world to improve cyclone prediction using the Vodafone Foundation’s DreamLab app. The app uses the computing power of smartphones while their users sleep with a network equivalent to a virtual supercomputer capable of processing billions of calculations, without collecting or disclosing any user data.

Social media to help monitor wildfires

Data scientists from Imperial’s Data Science Institute have developed a new machine learning model to predict and monitor wildfires.

Scientists combined social media data and geophysical satellite data to predict wildfire characteristics with high accuracy. The study demonstrates how social media could be key to making more informed, socially driven decisions, which could help disaster management teams to identify areas of immediate danger.

Above: Professor Ralf Toumi in the Global Data Observatory exploring cyclone data.

Research and enterprise



Imperial is home to world-leading research and innovation.

Results from the Research Excellence Framework rank Imperial top in the UK overall for research, with a greater proportion of world-leading research than any other UK university.

Our White City Campus provides a platform for innovation, entrepreneurship and multidisciplinary research. Academics here focus on ground-breaking research and turning their ideas into new ventures – in areas such as quantum engineering, clean energy and machine learning.

In 2022–23, we continued our commitment to both discovery-led research and the translation of that work into tangible benefits for society.

2022–23 in focus

Launch of Institute for Deep Tech Entrepreneurship

Imperial launched a pioneering new Institute for Deep Tech Entrepreneurship in September 2022. The Institute aims to drive the development of groundbreaking, ambitious technologies with world-changing potential, and to support a thriving Deep Tech ecosystem across the UK and beyond.

Deep tech refers to the collective innovation of products or services to addressing the world's most pressing challenges – including climate change, developing sustainable food and water systems, and improving human health.

The Institute builds on Imperial's strong research foundation and our entrepreneurial culture. It focuses on three key areas: supporting commercialisation of deep tech, addressing ecosystem and policy challenges, and developing a research platform.

The quantum sensor onboard the XV Patrick Blackett on the River Thames

Navigating to the future

A prototype quantum sensor built at Imperial, with potential application in GPS-free navigation, has been tested in collaboration with the Royal Navy.

The test marked an important milestone in bringing new quantum technologies out of the lab and into real-world settings. The experiment is the first step towards understanding the application and exploitation of quantum-enabled navigation, which could provide significant navigational advantages in satellite-denied areas.



2022–23 in focus

Changing the face of trial monitoring

A multi-disciplinary team of researchers has developed a way to monitor the progression of movement disorders using motion capture technology and AI.

The team of AI and clinical researchers combined human movement data gathered from wearable tech, with new medical AI technology, to identify movement patterns, predict future disease progression and increase the efficiency of clinical trials in two very rare disorders – Duchenne muscular dystrophy (DMD) and Friedreich’s ataxia (FA).



Above: Professor Aldo Faisal with Luchen Li, who is wearing a sensor suit.
Below: Postdoctoral research fellow Alice Malivert in the plant growth room. Alice is creating an AI tool to detect drought stress from plant leaf images.



Imperial selected for US \$148m AI initiative

Up to twenty Imperial fellows will be funded for up to six years, as part of a new initiative to support them in learning and applying AI methods to their research.

Imperial was selected alongside eight leading universities across the world, as part of The Eric and Wendy Schmidt AI in Science Postdoctoral Fellowship. The \$148m global initiative aims to accelerate the next scientific revolution by applying AI to research in science, technology, engineering and mathematics.

Graduates win prize for packaging invention

A startup founded by Imperial graduates won £1 million in the Prince of Wales’ Earthshot prize in December 2022.

Notpla, founded by Imperial alumni Pierre Paslier and Rodrigo Garcia developed a seaweed-based biodegradable alternative to plastic. The team won in the Earthshot category ‘Build a Waste-Free World’ awarded to efforts to eliminate food waste, single-use packaging and inspire a new generation of people, companies and industries to reuse, repurpose and recycle.

The Notpla team met while studying Innovation Design Engineering at Imperial and the Royal College of Art, where they received support from Imperial Enterprise Lab, the Centre for Climate Change Innovation and the Imperial White City Incubator.

Notpla hand image by David Lineton



Education and the student experience



At Imperial we are committed to offering all of our students a world-leading, inclusive education experience embedded in a vibrant research environment.

The free flow of ideas and some of the UK's best-resourced entrepreneurship facilities give a distinctive edge to our research-intensive education – ranked among the best in the world.

In the Guardian's University Guide 2023, Imperial was named as University of the Year – with commendations for strong performance with graduate career prospects and having the highest levels of student satisfaction for teaching in England.

In 2022–23, we have continued our world-leading education offer across all our campuses, using the latest innovations in teaching and world-class facilities.

2022–23 in focus

Maths School opened for applications

Applications for Imperial College London Mathematics School opened in 2022 ahead of the first cohort's entry in September 2023.

The School focuses on attracting applications from groups that are under-represented in STEM (Science, Technology, Engineering, Maths) careers and will open in collaboration with Woodhouse College and the Department for Education.

All students will study A Level Maths and Further Maths, as well as at least one other subject. The school will provide a unique learning environment with mentoring by some of the world's leading mathematicians and other academics, as well as current Imperial students.

The first cohort of Imperial College London Mathematics School in their first week of classes.



2022–23 in focus

Virtual reality training

Researchers from the Department of Earth Science and Engineering, in collaboration with the Digital Media Lab and Interdisciplinary EdTech Lab, are leading a cross-university project to build a software platform for Virtual Reality for Student Education (ViRSE). The project will simplify the production and use of educational virtual reality simulations.

With the help of the Digital Media Lab, Imperial has also become the first medical school in the UK to use virtual reality (VR) to train doctors. The VR headsets are helping students experience emergency situations such as cardiac arrest or an asthma attack. The VR experience has been designed to allow trainee medics to have near-real-world experiences before entering the workplace.

Digital innovation

An innovative mathematical solutions software is being trialed across Imperial. Researchers from the Department of Mechanical Engineering have helped to develop the platform, which is called ‘Lambda Feedback’.

The tool provides instant automated personalised feedback on student’s mathematical problem solutions – the current alpha-version uses deterministic algorithms, with the inclusion of generative AI capability planned.

Across Imperial, our departments with computing expertise are working together to create an online platform to make it easier for staff and students from any department to build new digital applications that integrate with other Imperial systems, and to deploy them on reliable infrastructure, quickly and easily.

Our Information and Communication Technology (ICT) Universal Data Platform team and the Learning Analytics (LA) Steering Group have also been working across faculties to develop technical and Intellectual Property infrastructure as well as a governance framework to underpin the widespread deployment of LA at Imperial.



Left: Undergraduate student Alexander Coombs using virtual reality to enhance surgical education in orthopaedics. Right: A student at the White City Campus.



Cultivating

Together we're generating novel ideas, from exploring scientific breakthroughs to advancing artificial intelligence



Curiosity



Ambitions for education

Since the launch of our Learning and Teaching Strategy, in 2017, Imperial's educational environment and teaching have been developing towards a modern, innovative, evidence-based approach.

In summer 2022, we carried out a consultation exercise to inform our renewed ambitions for education and the student experience and identify what activities would allow us to meet these ambitions. As a result of this consultation, we are now prioritising three themes and two enablers, which include developing lifelong learning opportunities for our students, and addressing staff and student load through the review of the assessment and feedback approaches used in our educational programmes.

Sustainability



Our strategic vision is to realise a sustainable, zero pollution future.

As one of the world's top universities, we have the power to help make that a reality.

Our staff and students are already at the cutting edge of finding sustainable solutions to reduce greenhouse gas emissions and waste. We know we need to do more to make our campuses greener and more energy efficient. In our Sustainability Strategy 2021–26 we confirmed our ambition to achieve carbon net zero for Scope 1 and 2 emissions by 2040, minimising Scope 3 emissions where possible. Our Imperial Zero Pollution (IZP) programme develops our strategy through four pillars: Our Research, Our Partnerships, Our Education, and Our Campuses.

Imperial Zero Pollution (IZP) programme:

■ Our Research

As a world-leader in climate change research, we are uniquely placed to deliver the scientific, technological and policy solutions we need to make the zero-pollution vision a reality.

■ Our Education

We will coordinate, embed and promote sustainability education initiatives more widely across Imperial College London; teach the skills and competences our students will need to help create a zero-pollution future and support adaptation to climate change.

■ Our Partnerships

We will use our convening power to build and facilitate partnerships across the world that drive the transition to net-zero, working with industry, business, governments, our local communities and the wider public.

■ Our Campuses

We will combine technological improvements to our infrastructure with behavioural changes to meet our ambition of reaching net zero emissions for scope 1 and 2 emissions by 2040.

2022–23 in focus

Sustainable food and drink on campus

The University launched its new Sustainable Food and Drink Policy, outlining a set of ambitious targets to reduce the impact its catering and retail outlets have on the environment.

As at 2023 the university has focused on reducing its use of beef and dairy, the largest drivers of its catering carbon footprint. We have decreased the volume of beef products on our menus by 47% since 2017 and are providing all non-dairy milks free of charge. Further initiatives include the serving of Marine Stewardship Council (MSC) certified fish and a cumulative reduction of 850,000 single-use cups across campus.

“The University is a global leader in research on climate change and sustainability, so it’s important that we walk the walk ourselves. The food and drink sector will play a huge role in reaching the UK’s Net Zero targets, and I’m incredibly happy that we will be at the forefront.”

Kamil Khoury, Head of Catering and Events

Food served at Plantworks, Imperial’s entirely plant-based and vegan catering outlet.



2022–23 in focus

Undaunted climate solutions

Undaunted, a climate innovation partnership between Imperial’s Grantham Institute and The Royal Institution, welcomed new corporate members this year.

Undaunted is a home for London-based innovators to implement global change through pioneering, practical solutions. Its founding partners (Imperial’s Grantham Institute and The Royal Institution), members, and activities make it a unique hub of climate innovation.

Furniture retailer DFS, professional services companies EY and Slaughter and May, and investment firm Talis Capital have joined founding partners HSBC and the Greater London Authority as corporate members of Undaunted. These organisations will have the opportunity to gain insights into new technologies and ventures coming through Undaunted and have access to expert advice from academic climate science and technology experts. They will also provide sectoral expertise that will help guide the development of the climate solutions being worked on by the community.

Sustainable drugs from recycled materials

Researchers have used recycled gold from SIM cards as catalysts for reactions that could be applied to making medicines.

This would replace the need for using rare metals for catalysts, instead of reusing materials already mined. This extraction method was developed by researchers at the University of Cagliari, and Imperial researchers have developed the process for using the recovered gold. Waste electrical and electronic equipment (WEEE) is typically sent to landfill, as separating and extracting the components requires a lot of energy and harsh chemicals, undermining its economic viability. Using this approach is a way to make our electronic goods more sustainable, by finding ways to recover and use these metals in a low-cost, low-energy and non-toxic way.



A speaker at Undaunted’s Demo Day, where investors and supporters of climate innovation heard pitches from, and networked with, ambitious climate-positive startups.

Improving our campus infrastructure

Imperial is working to decarbonise the South Kensington Campus by removing the steam heat network and central steam generating systems in the Energy Centre. This work will migrate the heat load to the centralised water heat network.

The project is expected to have significant environmental benefits and is estimated to lead to a reduction of 2,400 tCO₂e, approximately 4% of the University's current scope 1 and 2 emissions.



2022–23 in focus



Research to improve sustainability

Imperial academics are leading a collaboration between industrial and academic partners to develop functional materials from biowaste products.

Most materials currently used in industry are either imported, such as critical metals like lithium and nickel, or produced using unsustainable components or processes. At the same time, combined food, forestry and agricultural waste is estimated to reach approximately 26.5 million tonnes per year and holds little economic value. The project aims to develop functional materials from local, bio-based waste resources.

Sustainability Week

This year's Sustainability Week brought together staff and students to celebrate research taking place across Imperial and explore work towards creating a sustainable university for the future.

Each day was themed, with focuses on Climate, Energy & Waste, Biodiversity, Water and Air. Students and staff heard from researchers about their work on the transition to zero pollution, found out what Imperial is doing to reduce its own environmental impacts and took part in workshops and events. Some highlights of the week's events included a panel discussing climate justice and climate science, a talk with eco-anxiety experts, a visit to the Environmental Society's Secret Garden in South Kensington, and a workshop led by student societies exploring effective solutions to the climate emergency.

Above: Researchers in the hydrodynamics laboratory, where wave tanks allow testing of fluid mechanics with civil and environmental engineering applications.

Global solutions for global challenges

Imperial has signed an agreement with Hitachi to create the Hitachi and Imperial Centre for Decarbonisation and Natural Climate Solutions, to collaborate in fundamental and applied research to drive the transition to net zero pollution.

The Centre will work on selected research projects, reports and white papers on the technologies needed to achieve net zero and will help train the next generation of scientists and engineers. Initial research projects are focused on carbon management, the decarbonisation of energy and transport, carbon dioxide removal and biodiversity, with a focus on new technologies and nature-based solutions.

Imperial has also formed a strategic relationship with the University of Tokyo for cleantech and energy research. The partnership builds on major industry-research centres in climate repair and energy systems that both partners have with Hitachi Ltd. All three partners have ambitions to create a sustainable society and accelerate the transition to zero pollution.

This will bring together scientists from both universities to work on research projects and the development of new technology around energy, decarbonisation and climate repair.

2022 also saw the launch of a partnership between Imperial and the Technical University of Munich (TUM) in Germany to develop new technologies to tackle global pollution. The Imperial – TUM Zero Pollution Network will bring together scientists, industry, governments and other partners to develop and translate solutions to some of the greatest sustainability challenges and combined threats of global pollution, biodiversity loss and climate change.

“We will bring together knowledge and promote the creation of cleantech innovations. I am confident that our collaborations will contribute to creating a better society on a global scale.”

Professor Teruo Fujii, President of the University of Tokyo

Below: The Brahma Institute at the South Kensington Campus.



Progress on reducing emissions

The table below shows our emissions for the last three financial years.

	2020–21	2021–22	2022–23
Total Energy / Fuel Use			
Scope 1 Gas (kilowatt hour)	241,000,000	251,000,000	220,000,000
Scope 1 Fleet Fuel (litres)	4000	6000	7000
Scope 2 Electricity (kilowatt hour)	48,000,000	56,000,000	77,000,000
Scope 3 Mileage (miles)	71,000	131,000	150,000
Total Carbon Dioxide Emissions			
Tonnes CO ₂ e (based on total energy/fuel use above)	54,000	57,000	56,000
Energy Intensity Ratio			
Total (tonnes CO ₂ e) / staff (tonnes CO ₂ e/FTE)	6.82	7.16	6.92
Total (tonnes CO ₂ e) / students (tonnes CO ₂ e/FTE)	2.73	2.8	2.8
Total (tonnes CO ₂ e) / building area (tonnes CO ₂ e/net internal area m ²)	0.11	0.11	0.11

1. Data covers all utility supplies with the exclusion of utilities supplied to Scale Space at White City as this is outside of the College's operational control.
2. A number of buildings where the NHS supplies utilities through an unmetered supply as part of service level agreement are excluded from scope 1 & 2 emissions.
3. Utility data is based on billed consumption. Where billed data is unavailable consumption forecasted by the College's Energy Broker is used.
4. Direct emissions from College-owned vehicles are calculated using fuel purchased on fuel cards associated with the vehicles.
5. Emissions from vehicles not owned by the College are calculated from expense claims submitted by staff and students in line with the College's policy. Mileage claims are assumed to be for a car with average emissions with an unknown split between petrol and diesel vehicles.
6. Carbon dioxide emissions are calculated using Department for Energy Security and Net Zero 2023 emission factors.

Across a typical year, we self-generate much of our electricity demand at South Kensington. We are undertaking a large infrastructure project at our South Kensington campus, which will reduce our emissions over the coming years with increased thermal efficiency and reduced losses from our district heat network. As part of this work, our two Combined Heat and Power (CHP) engines have been turned off for the last three months of the reporting period and are expected to remain off until early 2024.

The CHP engine shutdown has removed our ability to self-generate electricity and to recover the heat energy from that process for our heat network. This has resulted in a 27% increase in grid imported electricity compared to last year, though this is offset by a reduction in total gas consumption and associated scope 1 emissions, which fell by 12% during the year.

We are investigating ways to improve our scope 3 reporting to enable us to better disaggregate between the different types of emissions. We are committed to aligning with the Standardised Carbon Emissions Framework produced by the Alliance for Sustainability Leadership in Education for the higher education sector. We intend to publish a full estimate of our scope 3 footprint in our next annual sustainability report.

Governance

The Council monitors how we are responding to climate-related risks, identified through the University’s risk management processes and supported by the Audit and Risk Committee.

We have implemented changes to our governance structure with the introduction of the Sustainability Strategy Committee, a sub-committee of the University Management Board (UMB). The Committee is responsible for overseeing the goals, priorities and implementation of the Sustainability Strategy at Imperial, reporting back to UMB each quarter. In addition, all Board papers and business cases must now routinely set out their sustainability implications.

This Committee includes a representative from every faculty, as well as from relevant operational teams, and students’ union, trade union and education representatives.

It is supported by working groups, including an academic expert group to bring our expertise to bear in support of sustainability of our operations. Individual faculties also have their own sustainability committees of departmental representatives to drive sustainability locally.

During 2022–23 the Committee focused its work on the following areas:

- strengthening the sustainability programme
- developing the proposed sustainable travel policy
- reviewing emerging plans for decarbonising the University estate
- updating the climate risk assessment
- supporting the development of faculty sustainability committees
- developing the Imperial College Carbon Budget Model
- driving up Laboratory Efficiency Assessment Framework (LEAF) take-up across the faculties of Medicine, Engineering and Natural Sciences, to reduce carbon footprints and improve sustainability of individual labs

Further information on the University’s approach to climate-related risk can be found in the Risk Management Framework on page 42.



Risk Management Framework

The Risk Management Framework is an integral part of the Internal Control Framework and is designed to support delivery of Imperial's strategy and its academic mission and comply with all its regulatory obligations. We consider risks in the short, medium and longer term, to help prioritise and direct management time and investment to the right risks. The core principles of the Risk Management Framework are based on the 'three lines of defence' model for the management of risk:

Line of Defence	Responsibility
1st	The first line of defence lies with the faculties, schools, institutes, departments and process owners whose activities create and manage the risks that can facilitate or prevent Imperial's objectives from being achieved. This includes taking the right risks. The first line owns the risk, and the design and execution of the University's controls to respond to those risks.
2nd	The second line of defence is responsible for the design and maintenance of frameworks, policies, procedures and instructions that support risk and compliance to be managed in the first line. It is also responsible for monitoring and judging how effectively the first line is achieving its aims and is more commonly referred to as functional oversight. The second line is directed by management.
3rd	The third line of defence is independent assurance that management operate an effective framework of controls to manage risk and that governance is appropriate around management of risk. The third line is directed by the Audit and Risk Committee and has organisational independence from management.

Principal Risk Dashboard

Our principal risks and approach to responding to them are set out in a Principal Risk Dashboard in the table below.

At the May 2023 and July 2023 Audit and Risk Committee meetings, the updated principal risks were reviewed, approved and subsequently shared with Council. As part of a broader governance review the University Management Board set up an Risk, Compliance and Ethics Committee to support the Audit and Risk Committee in providing oversight of our organisational risk.

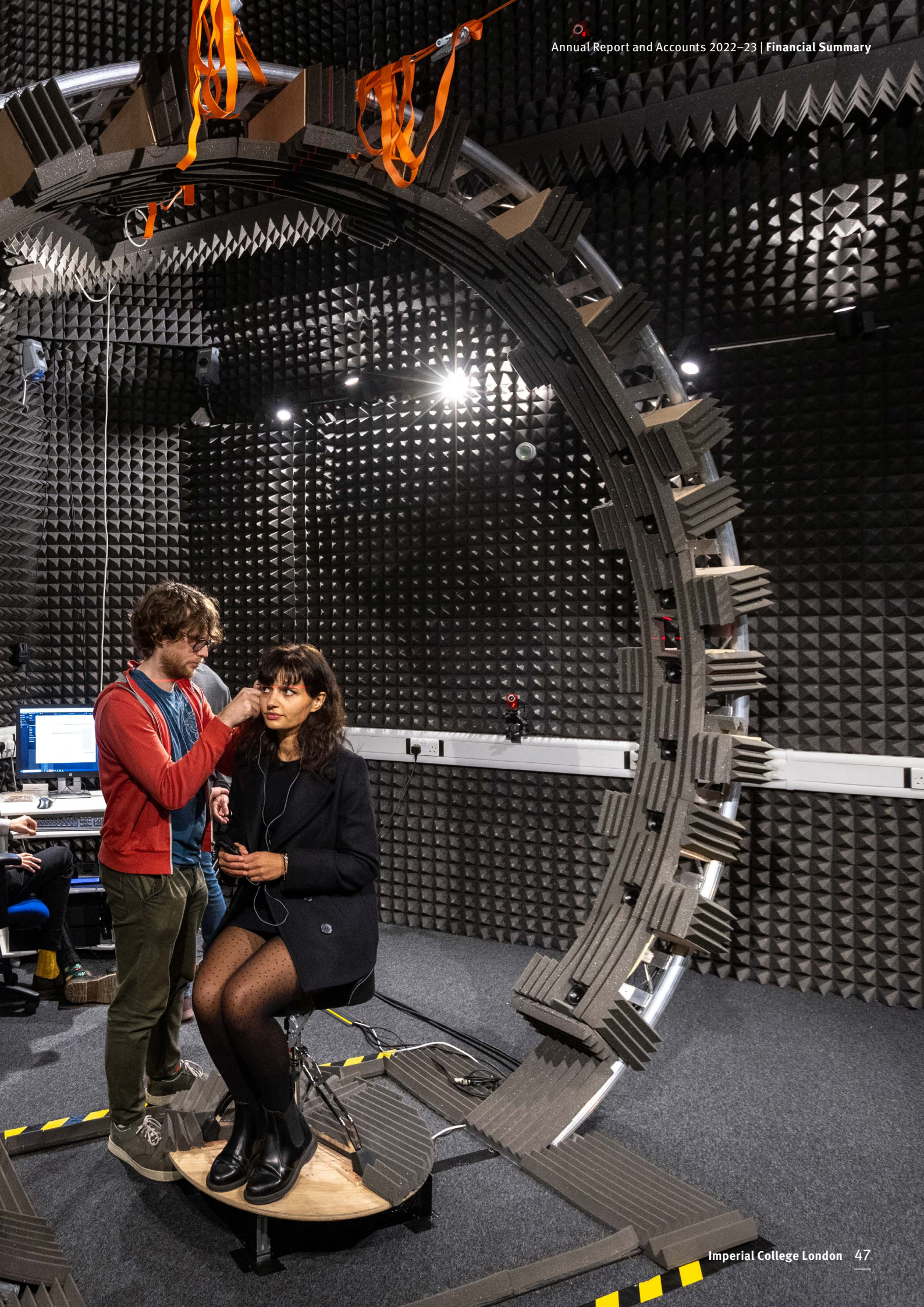
Risk	Risk management approach
<p>Financial sustainability</p> <p>Insufficient cash flow to deliver Imperial's academic mission over the long term.</p>	<p>Following a review of University management governance, new UMB committees are in place to support prioritisation of Imperial expenditure within the available funding envelope.</p> <p>The Operations and Infrastructure Committee reviews and prioritises competing investments on our estates and the Finance, Planning and Investment Committee oversees the annual planning round, the development and implementation of Financial Strategy and the University's Investment Portfolio.</p> <p>Our planning and budgeting processes include analysis of revenue streams to ensure that income delivered is sufficient to meet our planned costs.</p> <p>Investment in our marketing and recruitment teams has increased to develop insight into the market risks associated with the tuition fee revenue stream (our largest), with actionable responses reviewed by Imperial leadership.</p> <p>We continue to liaise with relevant external bodies so that they are aware of the impact that changes in our operating environment might have.</p>
<p>Research</p> <p>Our Research quality, volume and/or impact does not stay at its current level or fails to keep pace with our peer group.</p>	<p>We continue to invest in our physical infrastructure creating highly desirable working spaces to conduct our research.</p> <p>Our salaries are regularly benchmarked to attract the best academic staff to deliver ground-breaking research outcomes.</p>
<p>Education and student experience</p> <p>Education: Failure to innovate and improve the quality of our education.</p> <p>Students: Failure to support our students and improve their mental health, wellbeing, safety and quality of experience.</p>	<p>We continue to invest in digital media labs and digital expertise to increase access to facilities to professionalise online education content.</p> <p>During the past year, Imperial commissioned an internal audit review of the processes and controls we have in place to support digital learning across the University. This highlighted that the structure of our EdTech labs supports sharing of good practice and continuous improvement in delivery.</p> <p>Resource for the existing learning and teaching strategy includes a digital innovation and a pedagogy transformation fund. This allows for regular calls to the community for bids to support the evolution of our education offer.</p> <p>A working group (AI tools for teaching and assessment) has been set up to review the processes in place to respond to generative AI developments, for example changes to assessment practices required following the release of ChatGPT.</p> <p>Imperial has worked with student representatives to develop a new mental health strategy and has continued to increase investment in student-facing services.</p> <p>The strategy includes a commitment to taking a proactive approach to support student and staff mental health and wellbeing, strengthened collaboration by improving and developing our partnerships with other providers of mental health services, and UMB senior leadership taking overall responsibility for implementation of the strategy.</p>

Risk	Risk management approach
<p>Supporting our people and culture</p> <p>This risk comprises four elements:</p> <ul style="list-style-type: none"> a) ability to recruit and retain high calibre staff b) ability to continue to provide the appropriate services to staff c) ability to change the culture to support delivery of the University’s strategic aims d) managing the mental health and wellbeing of our staff throughout Imperial 	<p>Each year, Imperial conducts a national benchmarking salary review against the relevant London markets for all job families.</p> <p>Our Work Location Framework sets out the options in relation to how and where members of staff from all job families may carry out their work activities, which include hybrid, on-site and remote.</p> <p>New ‘report and support’ tools have been introduced to encourage staff to speak up and report any concerns or issues and we are training up more harassment advisors.</p> <p>We are continuing with a programme of regular staff surveys, and recommendations from these are taken to UMB for action.</p> <p>Imperial has been awarded a Race Equality Charter to add to its Athena Swan Charter in support of gender equality. Pay gap data is published, with action plans in place both at a university-wide and a local level to address gender and race pay inequality.</p>
<p>NHS partnerships</p> <p>Changes in the capability of Imperial’s NHS Partner Trusts impact delivery of the academic mission of the Faculty of Medicine and the University.</p>	<p>The Imperial College Academic Health Science Centre (AHSC) manages the key relationships between the University and its main acute NHS partners in North-West London. Strategic AHSC planning is in place to maximise relevant NHS funding streams.</p> <p>Legal agreements (based on national templates) underpin individual research projects between College and any NHS partner.</p> <p>The Faculty of Medicine estate strategy is to consolidate activities on fewer sites to reduce risks associated with shared NHS estate.</p>
<p>Major incident or crisis leading to business disruption</p> <p>A serious incident that severely impacts continuity of the University’s critical operations.</p>	<p>Through business impact assessments, Imperial has developed business continuity plans for its most critical operations. Exercises test these plans and improvements identified are incorporated into updates.</p> <p>When plans are invoked to respond to an incident or event, we carry out a lessons learned review to improve our future response to similar incidents or events.</p> <p>Imperial use a specialist third-party provider to monitor planned events in proximity to campus to respond to possible threats from activist groups.</p>
<p>Cyber incident and/or data loss</p> <p>Probability of exposure to, or loss resulting from a cyber-attack or data breach causing significant disruption to the Information Technology environment and products used by the University.</p>	<p>Our research attracts significant external interest and we continue to invest substantively in new protective controls to safeguard the security of this valuable work.</p> <p>Human behaviour and non-compliance with Imperial’s Information Security Policy increase the risk of an information security breach which, depending on the nature of the incident, could be significant to Imperial. Information Security Awareness training has been made mandatory and also requires the learning to be repeated every two years.</p> <p>We have invested heavily in our network monitoring capabilities, and in case of a breach, we have a detailed plan to limit any damage to University operations.</p>

Risk	Risk management approach
<p>Climate Change</p> <p>Our operations, finances and/or plans are adversely affected by climate change.</p>	<p>A Sustainability Strategy Committee is now in place to oversee the goals, priorities and implementation of the Strategy at Imperial, including management of our transition to meet our net-zero ambition.</p> <p>Our capital plan includes resource to continue decarbonisation of our South Kensington campus and develop a roadmap to support the long-term transition to zero carbon.</p> <p>Strategic partnerships have been developed between industry and academics to facilitate research into sustainability, clean tech and decarbonisation.</p>
<p>Damage to reputation</p> <p>Damage to reputation could result from Imperial's actions, practices, associations, sector implications, or negative publicity, whether accurate or not. Reputational damage can hurt Imperial's financial sustainability, customer base, and ability to find and retain skilled employees. Reputation damage is often unexpected and can occur with little or no warning.</p>	<p>Imperial will continue to review its Council membership to increase the diversity of the group and facilitate a broader representation of views.</p> <p>The UMB is supported by sub-committees to facilitate leadership review of decision making across the organisation.</p> <p>We maintain political relationships at a local, national and international level to manage changing stakeholder expectations and to support transparent and positive communication channels.</p>

FINANCIAL SUMMARY

Johan Pawels, Rapolas Daugintis and Sarah Wissing working on Audio Experience Design in the Dyson School of Design Engineering. They are working on a research project that will use methods from AI to design immersive audio technologies and techniques.



Financial foreword

Our financial focus became shorter-term as we were confronted by a series of external shocks



Dr Tony Lawrence
Chief Financial Officer

The market volatility that characterised the first few months of the year was exceptional. Gas prices soared as the impact of the Russian invasion of Ukraine on gas supply for the forthcoming winter became apparent. Given the energy-intensive nature of much of our activity, our cost base is sensitive to fuel costs. The government price capping helped mitigate the impact until it expired at the end of March.

We were shielded from any adverse impact related to the rapid movements in interest rates in the autumn as nearly all our debt is on fixed-rate terms. Higher interest rates meant we earned more than we had anticipated on our cash balances. These higher rates are also contributing to a more favourable valuation of the Universities Superannuation Scheme, as the scheme's liabilities are more heavily discounted as a result. The latest valuation is still underway and is not reflected in the figures reported for 2022/23.

Whereas higher interest rates have had some benefits, the rise in inflation that drove them higher in the first place has been unwelcome and challenging to manage. Higher prices adversely impacted the cost of living of all our staff and students and also led to a jump in our operating costs. We have paid particular attention to those in most need, weighting salary increases towards those earning less and increasing the amount available in hardship funds for students. We made a one-off payment to all staff to help alleviate the pressure of winter bills and brought part of the 2023/24 pay settlement forward into the last quarter of the year.

In the early months we revisited our contingency plans to safeguard our longer-term financial sustainability in case the economic situation deteriorated further but did not need to deploy them. Timing issues played a part in the surplus that was recorded for the year. With capital grants and donations we typically recognise income ahead of the related expenditure being incurred. This contributed significantly to the reported operating surplus of £29 million, with capital income reaching £49 million.

Liquidity was not an issue as cash balances remained healthy throughout the year. Our strong statement of financial position provides a source of stability in volatile times and gives us resilience to manage unexpected events in the

short-term and adjust operations in a more measured way if required.

One of the ways of protecting against downside financial risks and reducing the likelihood of needing to rely on contingency plans is to further improve our underlying financial performance. A key measure for us is the cash from operations we generate each year. As well as providing a buffer against external shocks, it enables us to invest in our physical and digital infrastructure to meet the expectations of our students and staff and help us maintain our pre-eminent global position. Operating cash first needs to meet our debt servicing requirements with the former at £56 million and the latter at £26 million, overall margins are tight. In the five years prior to the pandemic our cash from operating activities was averaging nearly £100 million per annum and we are targeting returning at least to this level in the short to medium-term.

For years we were constrained by space, but we now have capacity to expand and are reviewing the appropriate size and shape for Imperial over the next decade to ensure we can continue to do what we do best and deliver our academic mission in a financially sustainable manner. This will help us determine our future campus plan. The pace of development will need to reflect affordability and funding available. Philanthropy will need to play a greater role.

We look forward with confidence. Our research order book has never been larger and our courses remain in high demand. 2022/23 again saw us having to navigate multiple challenges and we came through it, maintaining a sound financial position. However, there is no room for complacency. In the absence of changes to the funding model we will need to be bold and potentially accept more financial risk in the short-term to realise our long-term ambitions. These are many choices to be made and trade-offs will be inevitable. We are ready for the challenge.

Dr Tony Lawrence
Chief Financial Officer

Five-Year Consolidated Summary Of Key Statistics

	2023 £m	2022 £m	2021 £m	2020 £m	2019 £m
Income and expenditure					
Tuition fees and education contracts	452	423	384	338	313
Funding body grants	183	152	156	154	156
Research grants and contracts	383	368	363	348	368
Other income	173	149	145	152	152
Investment income	26	7	7	6	7
Donations and endowments	52	64	24	28	77
Total income	1,269	1,163	1,079	1,026	1,073
Staff costs	646	603	591	567	537
Pension provision	-	152	5	(72)	117
Other operating expenses	476	394	356	364	376
Depreciation and amortisation	92	91	85	80	79
Interest and other finance costs	26	19	19	22	20
Total expenditure	1,240	1,259	1,056	961	1,129
Surplus/(deficit) before other gains and share of results of JVs and associates	29	(96)	23	65	(56)
Gain/(loss) on investments and disposals of non-current assets	1	(28)	128	60	19
Gain on disposal of interest in associates	-	-	13	-	-
Share of results in joint ventures and associates	1	-	(2)	(2)	(2)
Surplus/(deficit) for the year	31	(124)	162	123	(39)
Balance Sheet					
Non-current assets	2,415	2,372	2,419	2,332	2,258
Net current assets	103	130	72	14	49
Long-term creditors and provisions	(752)	(767)	(632)	(649)	(732)
Net assets	1,766	1,735	1,859	1,697	1,575
Capital Expenditure					
Externally funded	66	34	42	34	34
Internally funded	68	19	51	105	145
Finance leases	1	-	-	-	-
Total in-year fixed asset additions	135	53	93	139	179
Liquidity					
Cash, cash equivalents and current asset investments	398	418	409	318	293
Loans	(415)	(425)	(435)	(447)	(456)
Finance leases	(88)	(87)	(88)	(88)	(89)
Net funds	(105)	(94)	(114)	(217)	(252)
Cash flow from operating activities	56	55	135	90	78
Student numbers (headcount)					
Full-time students – undergraduates (UG)	11,961	11,720	11,279	10,457	10,054
Full-time students – postgraduates (PG)	9,076	9,029	9,169	7,807	7,514
Part-time students (PG only)	1,994	2,042	1,977	1,670	1,603
Total	23,031	22,791	22,425	19,934	19,171
Number of full-time equivalent staff	8,133	7,937	7,967	7,977	7,868
Staff costs as a percentage of expenditure	52%	60%	56%	52%	58%
Staff costs as a percentage of expenditure excluding pension provision	52%	55%	56%	55%	53%

Financial Review 2022–23

Overview

Imperial’s overall surplus for the year was £30.9 million (2022: deficit £123.6 million). This was broadly in line with the 2021–22 figure after adjusting this for the impact of the £153 million increase in the pension provision following the conclusion of another USS valuation. However, the outturn in 2022–23 was helped by a £29.6 million year-on-year improvement in investment performance.

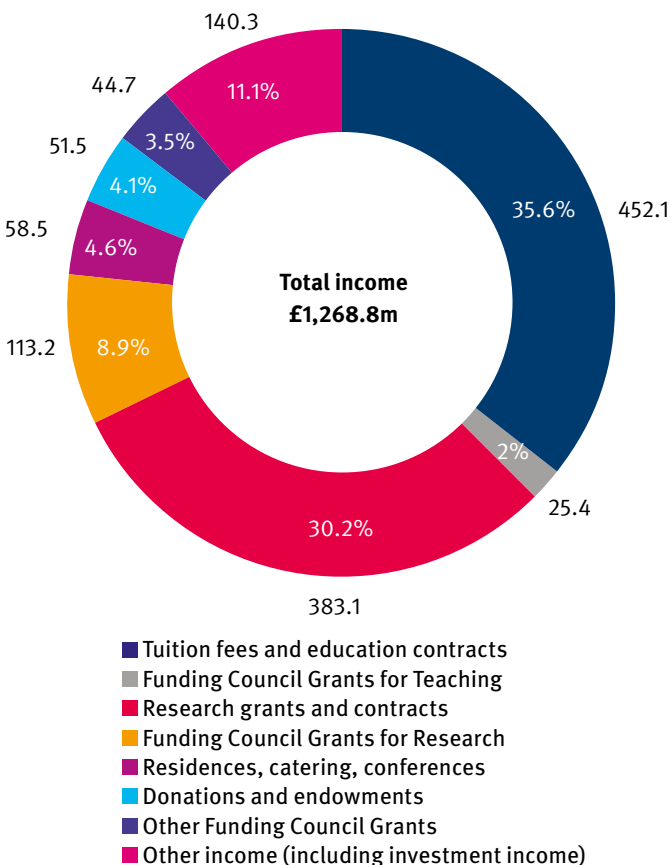
The surplus on our operational activity before gains and losses on investments was £28.7 million in 2022–23, compared to a deficit in 2021–22 of £96.2 million, or surplus of £55.9 million after adjusting for the movement in pension provision. High inflationary increases to our cost base were only partially mitigated by growth in income levels. This surplus included total capital income of £48.6 million, an increase of £12.5 million over the previous year.

Cash from operating activities of £56.4 million also remained in line with 2021–22. The previous year had been impacted by adverse working capital movements, whereas there was no material working capital impact in 2022–23.

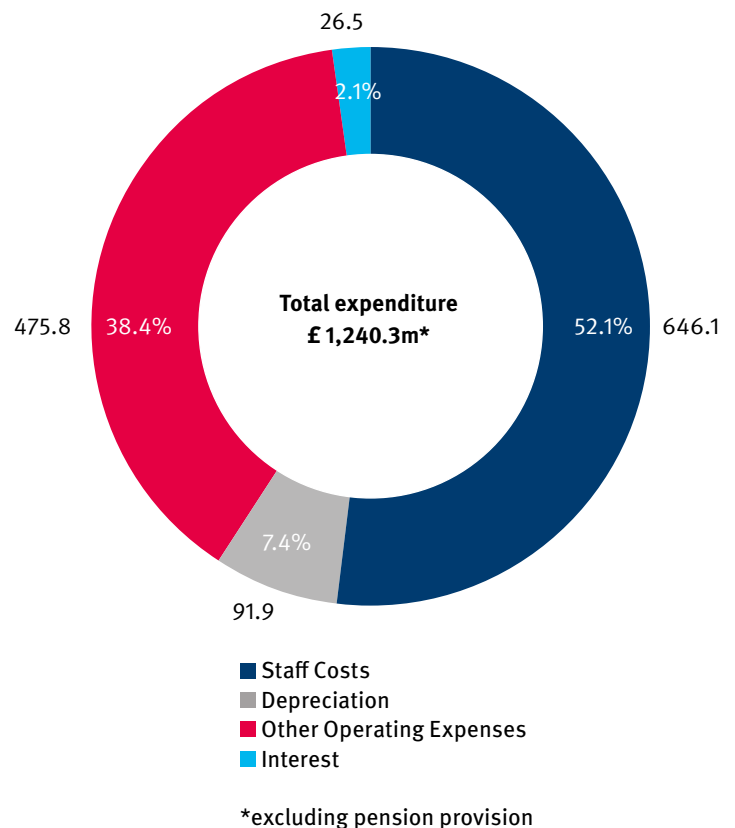
Our investment income was £19.2 million higher than in the previous year because of the higher level of interest earned on our cash balance. This cash balance was £348.1 million at year-end (2022: £367.8 million).

Our overall level of capital investment in facilities, equipment and software increased to £134.9 million (2022: £52.8 million), with the balance between internal and external funding being almost 50:50. The value of Imperial’s net assets rose year-on-year to 1,766.0 million (2022: £1,735.1 million), mainly because of increased additions to fixed assets under construction.

Income by source 2022–23 (£ million)



Expenditure by category 2022–23 (£ million)



Income

Total income grew by 9.1% (£105.5 million) to £1.27 billion, with nearly all sources of income increasing. New endowments were below the record-breaking level of the previous year, but this tends to be a volatile number. As well as reflecting inflationary growth, tuition fees grew because of an 8.8% increase in the number of overseas fee-paying students. We also received a significant uplift in our funding body grants after years of remaining fairly static. A large proportion of this increase was ringfenced for specific activity, including capital projects. Research activity continued to pick up, continuing the trend seen towards the end of the previous year, as we moved on from the pandemic.

Tuition fees and education contracts

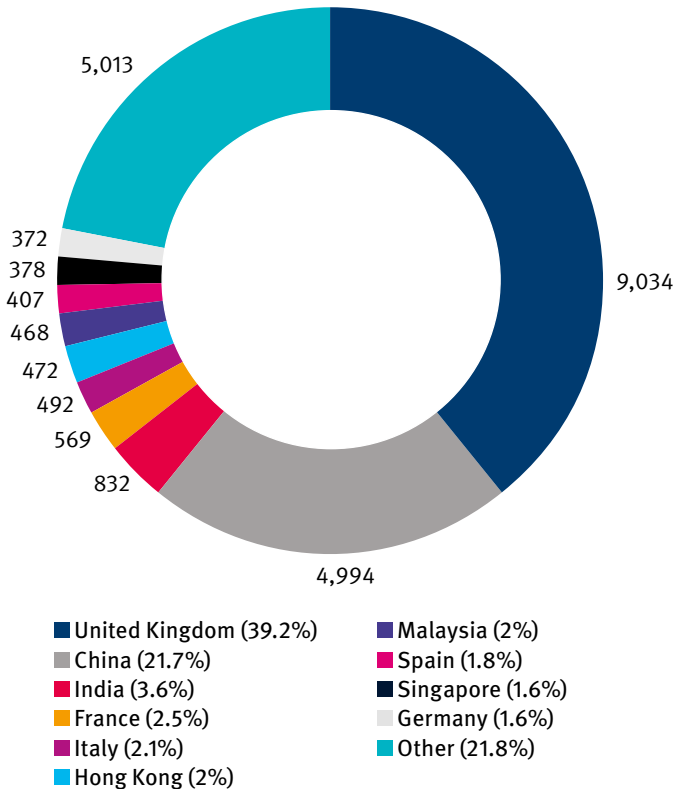
With each additional cohort of EU students that were entitled to home fee status graduating, the balance between home and overseas fees is tipping more towards the latter. Home student fee income reduced by £4.7 million in 2022–23 compared to the previous year, but this was more than offset by the £33.3 million of additional tuition fee income from overseas students.

Overall student numbers only grew by 1% last year, so most of the increase in tuition income was a result of fee rate increases (though not for home undergraduates, where rates continue to be capped at £9,250) and the change in mix between home and overseas students.

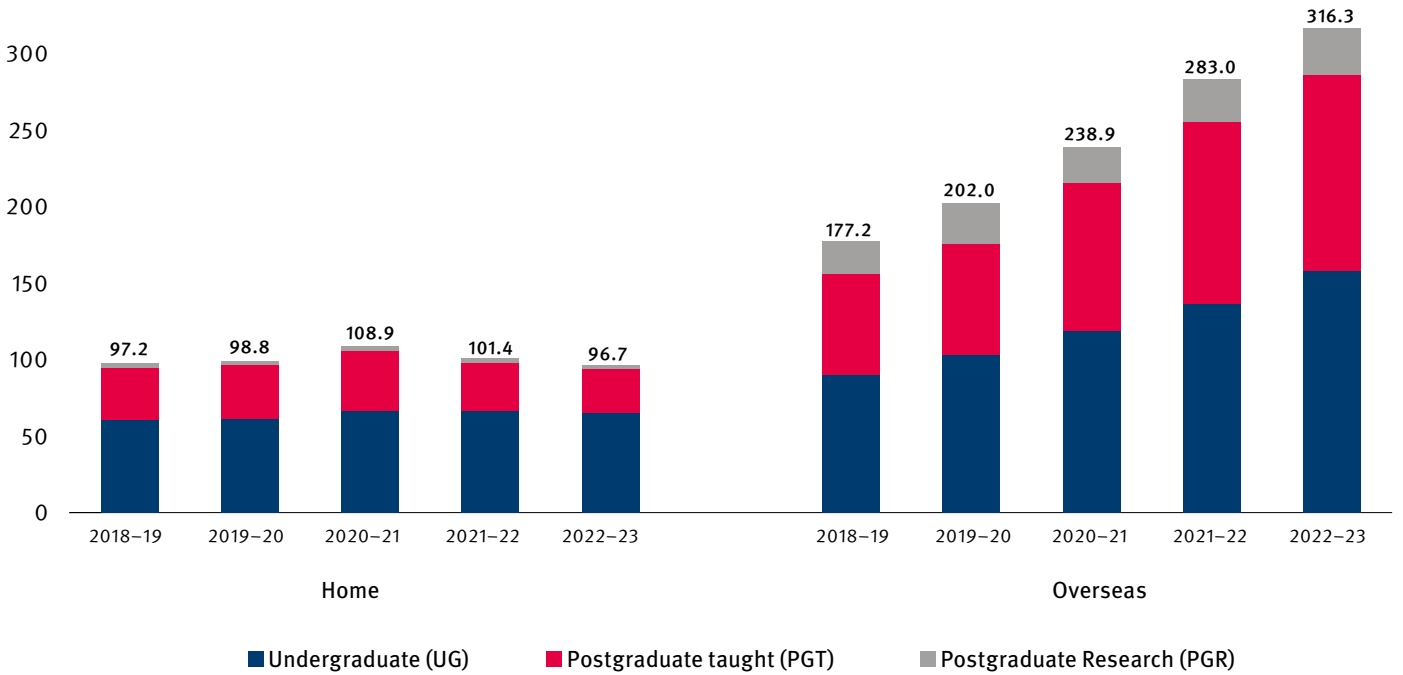
Application numbers at undergraduate level for entry in 2022–23 were similar to the previous year, having been growing steadily for a number of years prior to this. Postgraduate application numbers fell for the second year in a row but remain well above pre-pandemic levels and the application to enrolled ratio remains over seven; at undergraduate level it is just under nine.

The top ten nationalities of our students remained the same as last year, representing 78% of our total headcount. Students from China comprise the largest group after the UK at 21.7% of the total (2022: 20.2%). The largest percentage increase in student numbers from any country was from India (up 17.5% to 832). Our efforts to diversify the make-up of our overseas student body to reduce the reliance on individual markets continue.

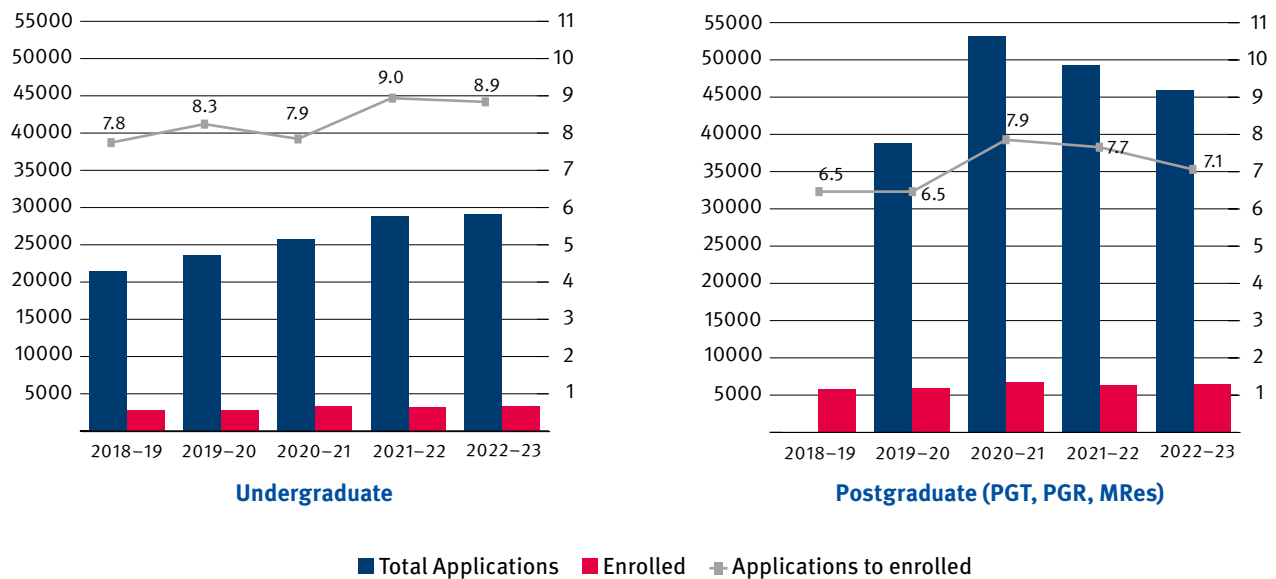
Student Headcount by Nationality



Total tuition fee income (£ million)



Ratio of applications to enrolled student numbers



Funding body grants

Our funding body (Office for Students for teaching and UK Research and Innovation for research) grants amounted to £183.3 million in 2022–23. This represented the largest year-on-year increase we have seen, however there were one-off amounts within this. For example, the total included a £12.3 million government grant towards the cost of replacing our steam boilers as part of our ambition to transition towards a net zero carbon position by 2040. Total capital funding from funding bodies was £31.7 million (2022: £14.1 million).

Our recurrent research funding grew as the size of the overall sector allocation increased. Despite coming top in the most recent Research Excellence Framework (REF) assessment of quality, our market share of funding fell by 1.4%. Funding reflects both quality and number of staff and other universities grew staff numbers submitted to REF more than we did.

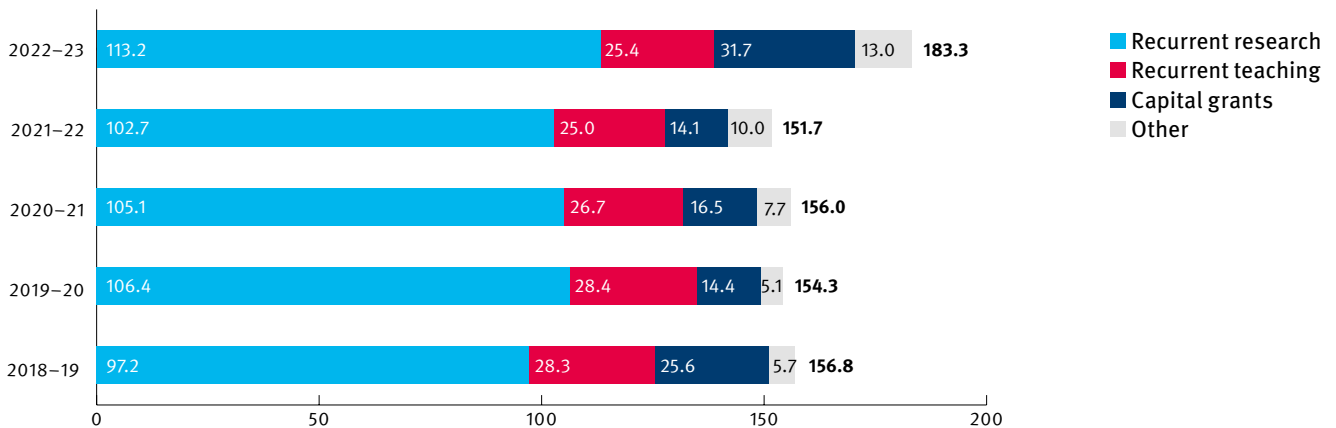
Research grants and contracts

Research grants and contracts income of £383.1 million was 4% up on the previous year. This figure represents in-year activity and not the value of new awards won in the year, since income from research grants can generally only be recognised when performance-related criteria are met.

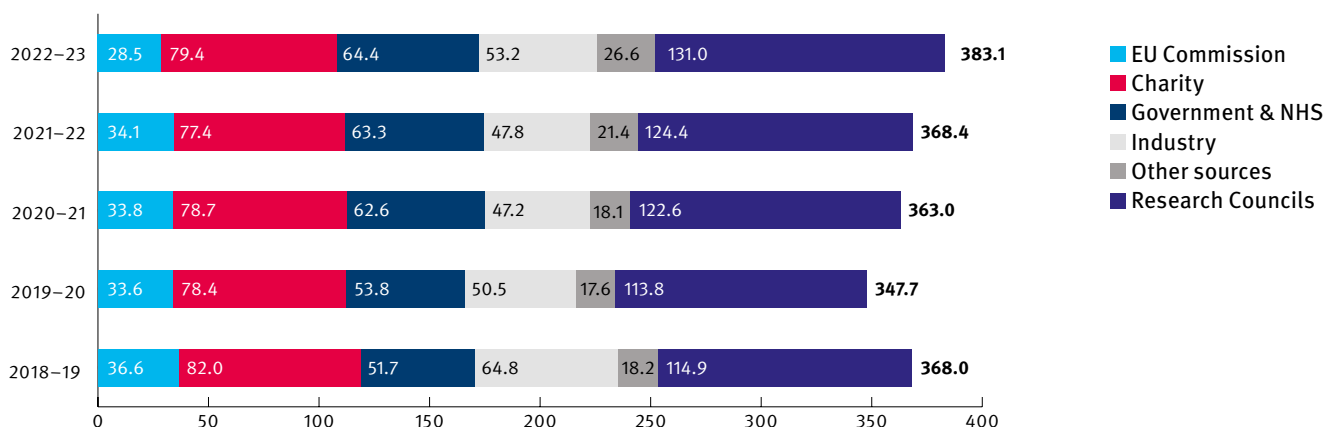
The split of income by funder group shows positive volume increases in all areas barring the EU commission. The September 2023 agreement for the UK to join the Horizon Europe programme (the EU’s key funding programme for research and innovation) as an associate member provides the opportunity to reverse the recent drop.

After an excellent year of winning new research awards, the balance on the order book reached £955 million at the end of 2022–23 (2022: £797 million), a record for the university.

Funding body grants income (£ million)



Research Award Income by Funder Type (£ million)



Other income

Other income grew across multiple areas with the main increase in residencies, catering and conferences, up £10.6 million (22%) on last year, making up over a third of what is reported as other income. Whilst our commercial letting surplus grew by £2.0 million as the market recovered post-pandemic, the remainder of the growth in income was primarily offset by a higher cost base due to inflationary increases in our staff and energy costs.

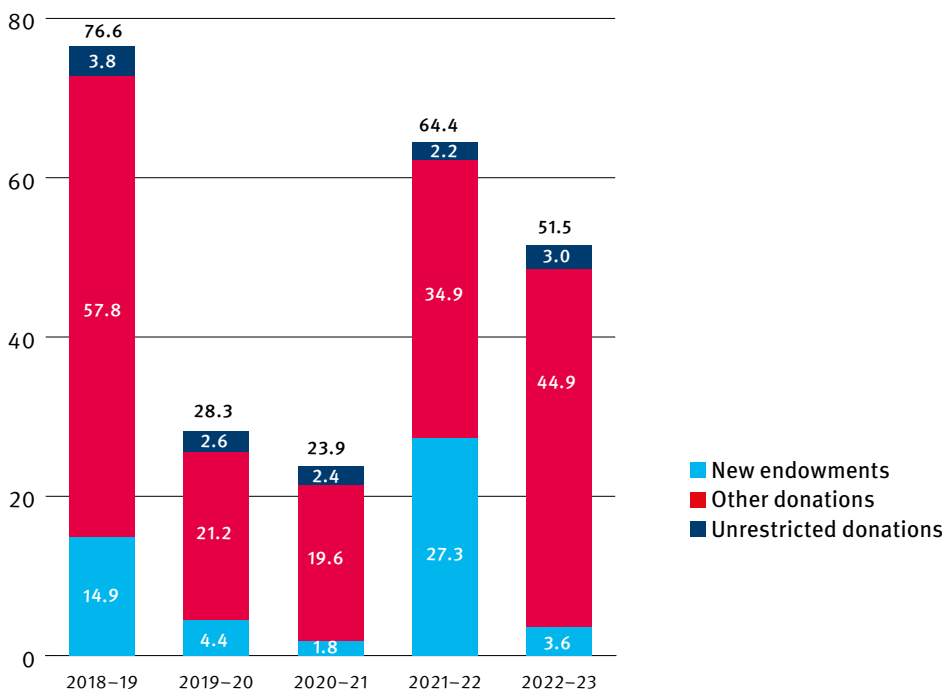
Consultancies and scientific services and recharges for NHS staff who work for Imperial make up a further 30% of our other income. This income is largely offset by related costs shown in other operating expenditure.

Investment income is made up of interest received on our cash balances and income earned on endowment and other investment assets. This income increased £19.2 million in year, primarily relating to an increase in the interest received on our cash in banks.

Donations and endowments

While there is some volatility expected in this number, donations and endowments broadly continue at pre-pandemic levels, having reversed the dip seen in 2019–20 and 2020–21. A large proportion of the donations recognised were research related at £21.4 million (2022: £12.6 million), with capital donations down to £6.1 million (2022: £10.9 million). New endowments recognised fell in 2022–23 from the record level the year before.

Donations and endowments (£ million)



Expenditure

Total expenditure was £1.24 billion, an increase of 12% (£137.9 million) on the previous year when the movement in pension provision was excluded. The overall number of full-time equivalent staff grew for the first time in four years, contributing to the £42.6 million increase in staff costs. Higher energy costs represented the biggest driver of the £83.0 million increase in non-staff other operational expenditure.

Staff costs

In cash terms the increase in staff cost in 2022–23 was £53.2 million, with the utilisation of the previously recognised pension provision reducing the staff cost reported in the Statement of Comprehensive Income and Expenditure that is used to calculate the surplus for the year. In addition to the annual salary increase set as part of local pay bargaining, we also made payments totalling £10.2 million to all staff to support them in managing cost of living increases.

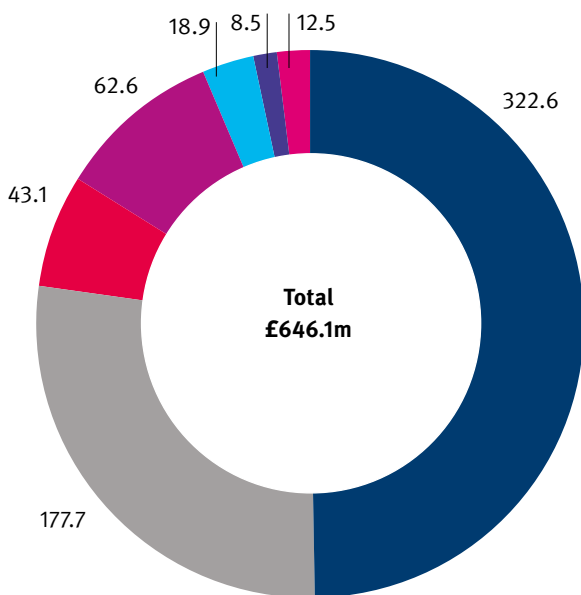
After keeping overall staff numbers flat over the last three years, 2022–23 saw an uplift in our net recruitment. Whereas some of this increase

reflected the increase in externally funded research activity, the majority of the increase of 196 full-time equivalent posts was in professional support roles, required to ease the workload demands arising from the jump in student numbers since 2020.

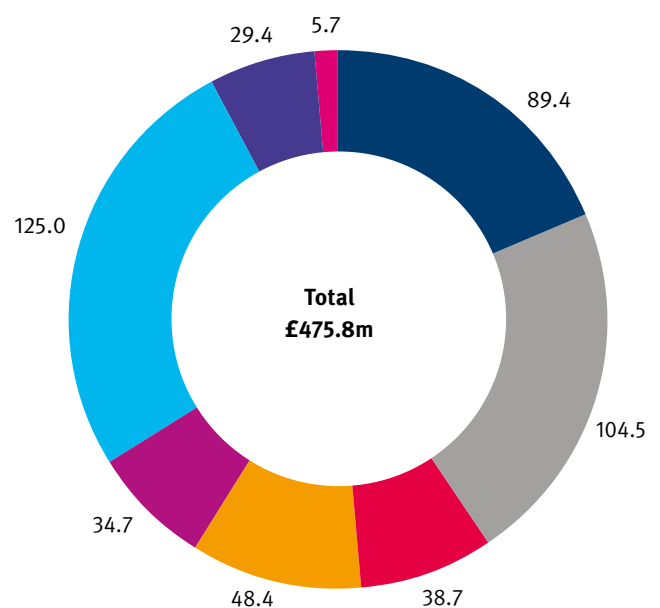
Whereas the USS pension scheme has been a source of considerable volatility in the reported results in many of the recent years, the changes in the pension deficit provision assumptions resulted in a small reduction of £0.2 million (2022: an increase of £152.1 million). The latest actuarial valuation as of 31 March 2023 is underway and is expected to lead to the reversal of the related provision in next year's results.

Employer contributions to the SAUL pension scheme increased by £6.5 million in line with the agreed plan, from 19% of career average salaries to 21% on 1 January 2023. Although the scheme is not in deficit, the Trustee was concerned about the contribution strain going forwards arising from the difference between the value of the new benefits being accrued and the amount being paid into the scheme.

Staff costs 2022–23 (£ million)



Other operating expenditure 2022–23 (£ million)



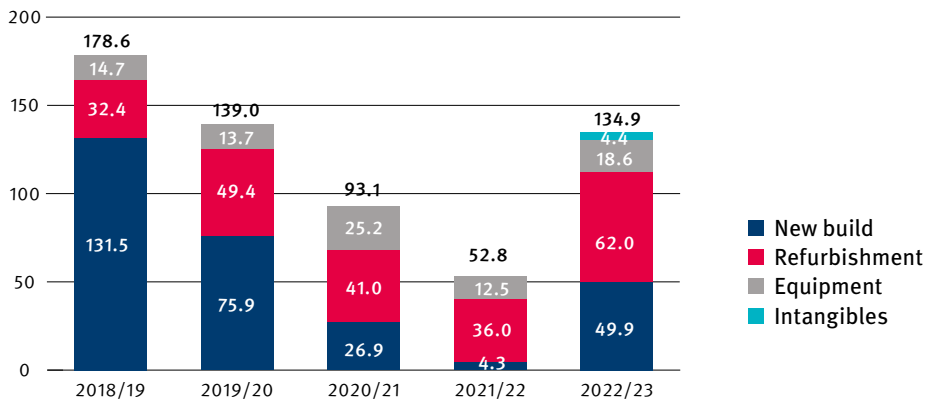
■ Academic departments
 ■ Research grants and contracts
 ■ Academic services
 ■ Bursaries and scholarships
 ■ Administration and central services
 ■ Premises
 ■ Residences, catering and conferences
 ■ Other expenditure

Non-staff costs

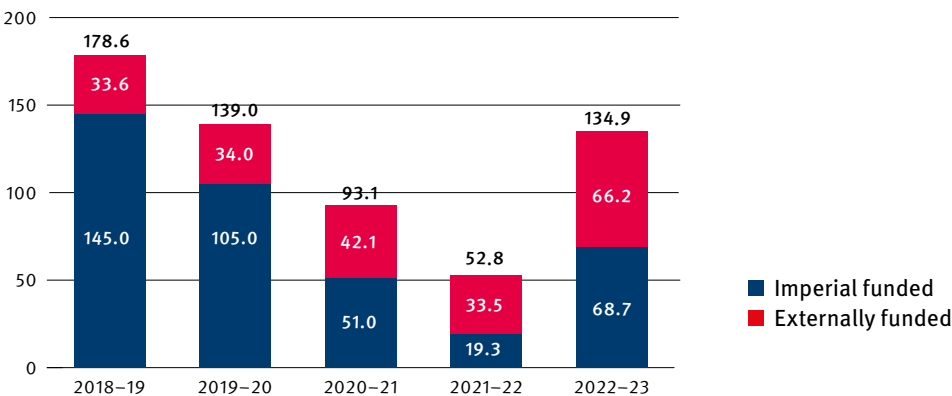
Operating expenditure increased by £82.2 million to £475.8 million in 2022–23. £45.1 million of this increase related to utility cost inflation. Imperial uses Combined Heat and Power (CHP) engines to generate electricity from gas and prior to 2022–23 this reduced the in-year energy cost as gas was cheaper than electricity. Following the Russian invasion of Ukraine, and resulting issues with gas supply, gas prices leapt and reversed the gains of previous years. The government’s price capping support helped mitigate the impact of cost increases during the winter months.

Travel costs increased by £10.9 million compared with last year as 2022–23 saw the first full year of conferences and field trips since pandemic-related travel restrictions eased.

Capital expenditure by category 2022–23 (£ million)



Capital expenditure by funding type 2022–23 (£ million)



Gains and losses on investments

Imperial's endowed assets were valued at £220.1 million at the end of the year (2022: £219.6 million). The target for the portfolio is to deliver a return of at least CPI +5% on a rolling ten-year basis. Heightened inflation combined with pessimistic market sentiment have proven a challenging background for investing and as a result the portfolio as at 31 July 2023 reported a return of 6.1% against the ten-year target of 8%. Further information on Imperial's endowed assets can be found in Note 14 to the financial statements.

Capital

The reported capital additions of £134.9 million in 2022–23 (2022: £52.8 million) represent an increased investment in both new buildings and refurbishment as well as our digital infrastructure. Among the major projects, work to rationalise the Faculty of Medicine's estate continued with further spend of £28.8 million recorded on the new School of Public Health building at White City ahead of its opening in 2023–24. The increase in spend was also driven by early work taking place to decarbonise our South Kensington Campus by replacing the steam boilers with more efficient water boilers and migrating buildings from steam to heated water. £12.3 million of the total of £23.1 million spent on this project in 2022–23 was funded externally. Investment in refurbishment of our core estate accelerated to meet the requirements of our staff and students across our multiple campuses.

Cashflow

Cash from operations of £56.4 million was £1.8 million higher than in the previous year. Imperial often benefits from favourable working capital movements and following the adverse movement in the previous year we had anticipated a reversal in 2022–23, though this did not materialise to any significant extent.

New endowment cash received of £3.2 million was down on the previous year (2022: £8.4 million), leading to an increased outflow in cash from financing activities. Interest paid and repayments of amounts borrowed remained in line with the previous year. No new borrowing was undertaken during the year.

The increased level of investment in fixed assets in comparison with the previous year, (£59.7 million increase) led to an increased cash outflow from our investing activities. This was offset to some extent by increased capital receipts of £49.1 million (2022: £41.1 million) and an increase in disposals of non-current investments of £19.6 million (2022: £16.1 million).

Cash movement

	2022–23 £m	2021–22 £m
Cash and cash equivalents at the beginning of the year	367.8	359.8
Cash inflow from operating activities	56.4	54.6
Financing activities	(26.4)	(20.8)
Investing activities	(48.7)	(28.0)
Exchange (losses)/gains on cash and cash equivalents	(1.0)	2.2
Cash and cash equivalents at the end of the year	348.1	367.8

CORPORATE GOVERNANCE AND INTERNAL CONTROL

Geology, Earth Science, and Earth and Planetary Science students visit Sardinia on a fieldtrip to explore the geology of the island.



Corporate Governance and Internal Control

This Corporate Governance and Internal Control statement refers to the 2022–23 financial year and period up to the date of approval of the audited financial statements and provides an overview of the governance structure of the University and its internal control arrangements. In addition to this statement, the University ensures transparency of its corporate governance through publication of materials on its website and conduct in accordance with the CUC Higher Education Code of Governance.

Corporate Governance

The University complies with the Committee of University Chairs (CUC) Higher Education Code of Governance and ensures transparency of its corporate governance through the regular publication of materials on its website and through its annual report.

As a UK University, Imperial is in the Office for Students' Register of officially registered Higher Education providers and is an exempt charity under schedule 3 of the Charities Act 2011, regulated by the Office for Students (OfS).

Imperial College London is committed to following best practice in all aspects of corporate governance. Imperial endeavours to conduct its activities in accordance with the seven Principles identified by the Nolan Committee on Standards in Public Life (selflessness, integrity, objectivity, accountability, openness, honesty, and leadership), and the Committee of University Chairs Higher Education Code of Governance (CUC Code). It has a whistleblowing procedure and complies with the Public Interest Governance Principles required by the OfS.

The Council is the governing body of Imperial College London – its structure and roles are established by Statutes. It is responsible for overseeing the strategic direction and finances of Imperial, for the efficient management and good conduct of the affairs of the University, and for oversight of its governance and compliance.

During 2022–23 there were 23 members of the Council, the majority of whom are independent members, including the Chair and Deputy Chair. Also included in its membership are representatives of Imperial's staff and student body. The membership increased to 27 from August 2023 as a result of the decision by Council to create new roles for additional staff and student members. The Council meets at least four times a year.

None of the independent members receive any payment for the work they do on Council, apart from the reimbursement of expenses. Imperial

maintains a Register of Interests of members of the Council and of Senior Officers which may be consulted by arrangement with the College Secretary.

The Council is supported by the committees set out below. All have approved terms of reference and specified membership, including independent and co-opted members to provide expert support. They are all chaired by independent members of the Council and report regularly to Council on their work.

Audit and Risk Committee considers the adequacy and effectiveness of the University's arrangements for risk management, internal controls, governance, and value for money. It meets four times a year with the University's internal and external auditors in attendance, and at least once a year meets separately with both sets of auditors for independent discussions. The Committee considers detailed reports with recommendations for improvement, together with management's responses and implementation plans. Both the committee and the internal auditors provide an annual opinion based on the work they have conducted throughout the year.

Endowment Board manages University assets that are not currently employed directly in the core academic mission of the University. It maintains a diversified portfolio of investments, providing regular distributions for the core academic mission of the University. The University's Socially Responsible Investment Policy seeks to ensure that any investment decisions consider the same social, environmental and governance concerns as the University, including pursuing an active approach to engagement with its investments in all asset classes.

Finance Committee is responsible for providing the Council with a strategic overview of the University's finances, with a focus on the longer-term financial plan and the actions taken to achieve it.

Property Committee provides strategic oversight to the academic, undergraduate accommodation and investment property portfolios held by the University and advises on the long-term real estate strategy for the University's estate.

Nominations Committee considers the composition of Council, including required skills; equality, diversity and inclusion (EDI); and forward planning and nominations for membership of the Council, Council's Committees, and the Court.

Remuneration Committee reviews the University's overall reward strategy to ensure that its remuneration practices are being managed in a fair and equitable way. It also reviews and approves the remuneration of the President, the Provost, and their senior direct reports. The committee complies fully with the CUC Higher Education Senior Staff Remuneration Code and its annual report was presented to Council in May 2023 and is published on the Imperial website.

The Senate is the academic authority of the University and its role is to direct and regulate the teaching work of the University. Chaired by the Provost, there are currently 34 members, who are all staff and students. The Senate meets at least three times a year.

The Court brings together key stakeholders of Imperial, including alumni and neighbourhood organisations. Its membership also includes representatives from the Council and from Imperial's senior management. The Court currently has 29 members and meets once a year.

The Council is responsible for appointment of the President and the Provost, who have direct responsibility for the delivery of Imperial's core mission in education and research. The President is the principal academic and administrative officer of the University and has responsibility to the Council for maintaining and promoting the efficiency and good order of the University. Under the terms of the OfS Regulatory Framework for Higher Education in England, the President is the designated accountable officer as Head of the Institution.

In 2022, the University carried out a review of its governance arrangements in line with good practice and to identify opportunities for further improvements. Council appointed Halpin Partnerships Limited to conduct a Council effectiveness review. The concluding report found that the governance was effective and made some recommendations to enhance existing practice. The recommendations were adopted by Council and implementation has been ongoing during the year. A key action was the addition of new staff and student members to Council membership to increase the community voice and improve diversity. There has also been a review of the University's governing documents, and implementation of all changes will be complete by December 2023.

Improving the diversity and gender balance on Council has been an important focus this year. Council has adopted an Athena Swan target of 40% female independent members by 2027. Following an externally assisted search process

overseen by the Nominations Committee, two female independent members have been co-opted onto the Audit and Risk Committee from 1 September 2023 and appointed to Council from 1 January 2024, to replace retiring members. Their addition will take the independent female membership to 35%. A search process is underway to appoint the new Chair of Council to succeed John Allan when he retires from Council at the end of his term on 31 December 2023.

Governance improvements have also been made to Imperial's executive committees. The University Management Board (UMB), which brings together the senior academic and non-academic executives in advising the President on all major strategic, policy and operational issues, has replaced the President's Board and the Provost's Board. UMB Committees are in place to facilitate focused discussion and delegated decision-making on specific topics, each chaired by a member of the UMB. These are: People and Culture; Sustainability Strategy; Academic Strategy; Finance, Planning and Investment; Risk, Compliance and Ethics; Operations and Infrastructure; White City Programme Board.

Internal Control

As the governing body of the University, the Council has responsibility for maintaining a sound system of internal control that supports the achievement of strategic and operational objectives, while safeguarding public and other funds and assets for which it is responsible, in accordance with the responsibilities it is assigned under the Charter and Statutes and the OfS Terms and Conditions of Funding for Higher Education Institutions.

The system of internal control is designed to manage rather than eliminate the risk of failure to achieve objectives. It can therefore only provide reasonable and not absolute assurance of effectiveness. The system is based on an ongoing process designed to identify the principal risks to the achievement of the University's strategy and objectives; to evaluate the nature and extent of those risks; and to manage them efficiently, effectively, and economically. This system is regularly reviewed by the Council and was in place for the year ended 31 July 2023 and up to the date of this report.

Council considers that there were no significant internal control weaknesses requiring disclosure.

The following processes are established and have been implemented during the period to the date of this report:

- The Council operates an annual pattern of work under which it regularly considers the plans and strategic direction of the University, including an annual meeting focused on strategic matters and an annually approved Financial Plan that provides the basis for any significant financial decision-making and a robust framework to ensure the University's financial sustainability and resilience.
- Regular reporting from Council committees, including from the Audit and Risk Committee, which has responsibility for reviewing risk management, control and governance and value for money arrangements on behalf of Council. Audit and Risk Committee provides an annual report to Council including its opinion on the University's arrangements.
- Reporting to the University's Audit and Risk Committee, the Internal Audit function undertakes an annual programme of reviews of the University's arrangements, culminating in an annual report on the adequacy and effectiveness of the University's arrangements for risk management, control and governance, and value for money. The annual audit plan is informed by the risks identified in

the University's Principal Risk Register, and as well as providing independent assurance the recommendations arising from their reviews further enhance the internal control environment and the delivery of value for money. In 2022–2023 and through to November 2023, Internal Audit function was provided under contract by KPMG.

- The External Audit function gives an independent opinion on the University's annual financial statements and the use of public funds. These statements summarise the University's financial performance during the year and its financial position as at the end of the financial year. In 2022–2023, PwC provided the External Audit function.
- The Risk Management Framework and Principal Risks Register, which are set out in more detail on page 42 of this report.
- Robust internal control arrangements, including for the prevention and detection of corruption, fraud, bribery, and other irregularities. Internal controls are reviewed and developed to ensure they remain fit for purpose and in response to risk evaluation and cover business, operational, compliance and financial risk. These arrangements are embedded into ongoing operations.
- The University's Code of Ethics applies to all staff and in 2023 its scope has been extended to all members of the University including students and Council. It is supported by a procedure for reporting of concerns.
- An established budgetary control process. Regular management accounts are reviewed by the University Management Board and Finance Committee. There are additional processes for the administration and control of research grants, research contracts, donations, and endowments where there are specific conditions on how the funds may be spent.
- Regular meetings between senior managers and professional service leaders to review progress and issues arising from operational activities, and similar meetings between the Provost and Faculty Deans in relation to academic developments.
- Extensive financial controls including planning and budgeting arrangements, defined delegations of responsibility, review oversight and reporting arrangements, policies and procedures, Financial Regulations detailing financial controls and procedures.

Council responsibilities in respect of the financial statements

The Council is responsible for oversight of the affairs of the University and is required to publish audited financial statements for each financial year.

It is responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the University to ensure that the financial statements are prepared in accordance with the Charter and Statutes, the Statement of Recommended Practice – Accounting for Further and Higher Education 2019 (SORP), and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

In causing the financial statements to be prepared, the Council has ensured that:

- suitable accounting policies are selected and applied consistently;
- judgements and estimates that are made are reasonable and prudent;
- the SORP, applicable accounting standards, and the Office for Students' accounts direction have been followed, subject to any material departures being disclosed and explained in the financial statements;
- financial statements are prepared on a going concern basis.

In addition, in accordance with OfS Regulations, the Council, through its Accountable Officer, is required to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the University and of the surplus or deficit and cash flows for that year.

The Council has taken reasonable steps to ensure that:

- funds from the OfS and Research England are used only for the purposes for which they have been given and in accordance with any other conditions which the OfS may from time to time prescribe;
- there are appropriate financial and management controls in place to safeguard public funds and funds from other sources;
- the assets of the University are safeguarded and to prevent and detect fraud; and
- the management of the University's resources and expenditure is economical, efficient and effective.

The Council recognises its responsibility for the maintenance and integrity of the University's website when publishing the financial statements and notes that legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.



Council and Council Committees

The members of the Council are the trustees of Imperial and are listed for the period from 1 August 2022 to 21 November 2023, the date that the Annual Report and Accounts have been approved.

The Council

Chair:

Mr J. Allan CBE

Independent Members:

Professor Sir Leszek Borysiewicz
Mr T. Courtauld
Mr J. Cullen (Deputy Chair and Senior Independent Director)
Sir Ron Kalifa OBE
Mr D. Khanna
Mr. R. Lewis
Dr M. Meaney Haynes
Sir Jonathan Michael
Ms S.E. Murray OBE
Dr M. Safa (EDI Champion)
Professor J.K.M. Sanders CBE
FRS
Mr S. Saxena
Mr C.G. Williams

Ex-Officio Members:

President:
Professor H. Brady
Provost:
Professor I.A. Walmsley FRS
Acting Chief Financial Officer:
Dr T. Lawrence
(to 31 January 2023)
Chief Operating Officer:
Mr R. Kerse
(from 1 February 2023)

Senior Staff Representatives:

Professor N. Brandon
Professor R. Craster
Professor F. Veloso
(to 31 August 2023)
Professor F. Allen
(from 1 September 2023)
Professor J.N. Weber
(to 31 July 2023)
Professor D. Ashby OBE
(from 1 August 2023)

Staff Members

Elected Staff Members:

Professor J. Mestel
(to 31 August 2023)
Professor L. Lightstone
(from 1 September 2023)

Appointed Staff Members:

Ms A. Ashley-Smith
(from 1 August 2023)
Ms R. Dabagh
(from 1 August 2023)
Dr L. Elvidge
(from 1 August 2023)

Student Members

President,
Imperial College Union:
Ms H. Wong
(to 31 July 2023)
Ms C. Boutrolle
(from 1 August 2023)
Appointed Student Member:
Ms. N. Podder
(from 1 August 2023)

College Secretary

Ms G. Brankin
(to 22 October 2023)

Interim College Secretary

Dr M. Edwards
(from 23 October 2023)

Audit and Risk Committee

Chair:

Mr J. Cullen

Membership:

Sir Jonathan Michael
Professor J.K.M. Sanders
Mr C. Williams

Finance Committee

Chair:

Dr M. Safa

Membership:

Professor H. Brady
Sir Ron Kalifa OBE
Dr T. Lawrence
(to 31 January 2023)
Mr R. Kerse
(from 1 February 2023)
Dr M. Meaney Haynes
Professor I. Walmsley
Mr C. Williams

Remuneration Committee

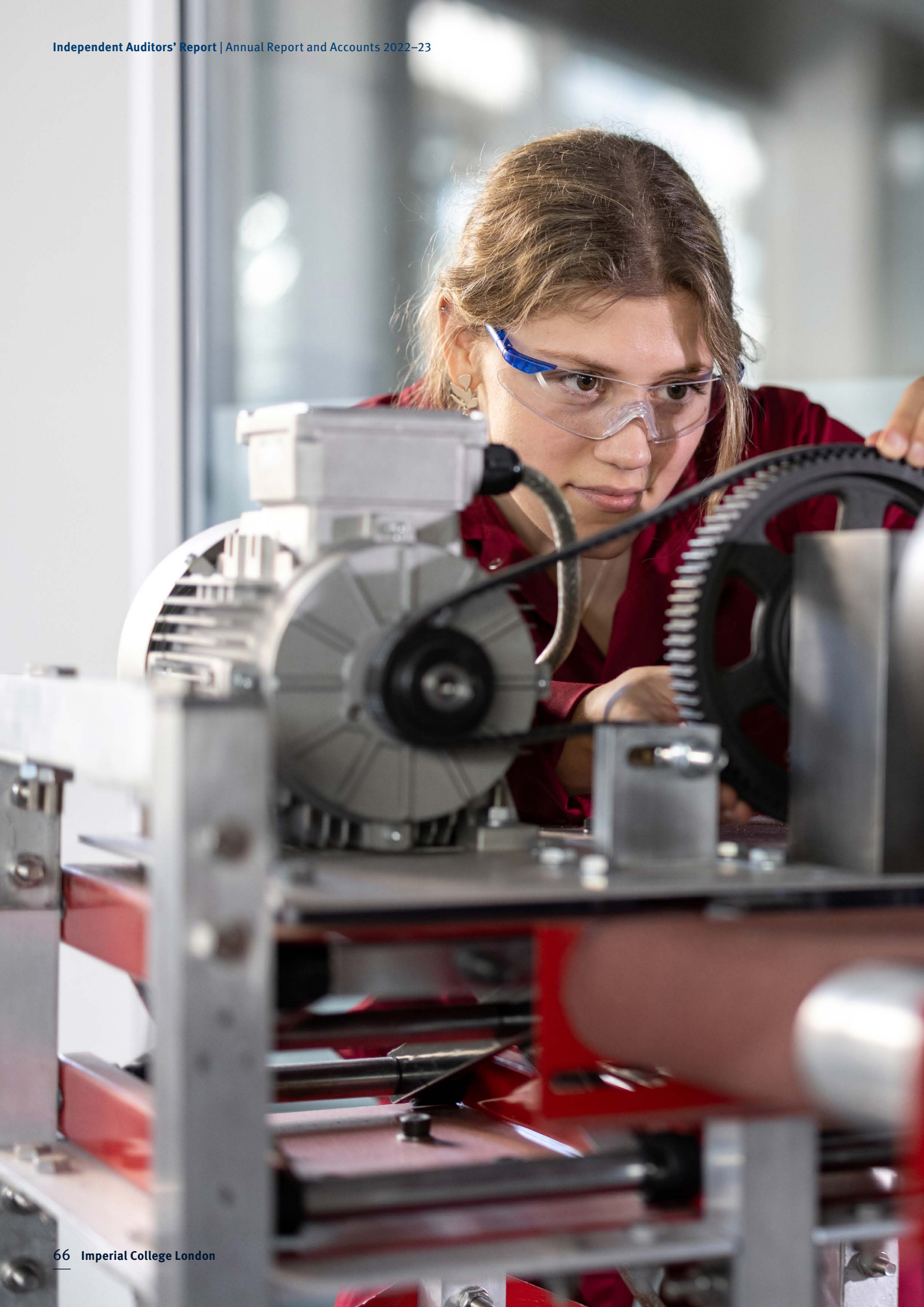
Chair:

Mr J. Cullen

Membership:

Mr J. Allan CBE
Professor Sir Leszek
Borysiewicz
(from 30 September 2022)
Dr M. Safa

Left: A researcher uses the wave tanks in the Hydrodynamics Laboratory.



INDEPENDENT AUDITORS' REPORT

Michelle Kostin, a bursary recipient in her final year of study, in the undergraduate mechanical engineering lab. Michelle is working on award-winning research on tyre particle capture.

Independent auditors' report

Year ended 31 July 2023

Independent auditors' report to the Council of Imperial College of Science, Technology and Medicine ("Imperial College London" or the "College")

Report on the audit of the financial statements

Opinion

In our opinion, Imperial College London's group financial statements and College financial statements (the "financial statements"):

- give a true and fair view of the state of the group's and of the College's affairs as at 31 July 2023 and of the group's and of the College's income and expenditure, gains and losses and changes in reserves, and of the group's cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland", and applicable law); and
- have been properly prepared in accordance with the requirements of the Office for Students' Accounts Direction (OFS 2019.41).

We have audited the financial statements, included within the Annual Report and Accounts (the "Annual Report"), which comprise the Statement of financial position as at 31 July 2023; the Statement of comprehensive income and expenditure, the Statement of changes in reserves, and the Consolidated statement of cash flows for the year then ended; the statement of principle accounting policies; and the notes to the financial statements.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Conclusions relating to going concern

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's and College's ability to

continue as a going concern for a period of at least twelve months from the date on which the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the Council's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the group and College's ability to continue as a going concern.

Our responsibilities and the responsibilities of the Council with respect to going concern are described in the relevant sections of this report.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Council is responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

Responsibilities for the financial statements and the audit

As explained more fully in the Council responsibilities in respect of the financial statements, the Council is responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Council is also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Council is responsible for assessing the group and College's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Council either intends to liquidate the group and College or to cease operations, or has no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the College and industry, we identified that the principal risks of non-compliance with laws and regulations related to compliance with the initial and ongoing conditions of registration of the Office for Students, and compliance with the terms of conditions of funding received from both the Office for Students and UKRI (including funding received from Research England), and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as the Office for Students' Accounts Direction (OfS 2019.41) and the College's Charter and Statutes. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to the use of journals to manipulate financial performance, management bias when making estimates and the classification of items on the cash flow statement. Audit procedures performed included:

- identifying and testing journal entries using a risk-based targeting approach for unexpected account combinations;
- challenging assumptions and judgements made by management in determining significant accounting estimates (because of the risk of management bias) in particular in relation to the valuation of investment properties, the valuation of the College's investment in its subsidiaries and the calculation of the USS pension provision;
- considering the classification of non-recurring transactions within the cash flow statement; and
- discussions with management, internal audit and those charged with governance, including consideration of known or suspected instances of non-compliance with laws and regulations and fraud.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Council as a body in accordance with Statute 11 of the Charters and Statutes of the College – and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Opinions on other matters prescribed in the Office for Students' Accounts Direction (OfS 2019.41)

In our opinion, in all material respects:

- funds from whatever source administered by the College for specific purposes have been properly applied to those purposes and, if relevant, managed in accordance with relevant legislation;
- funds provided by the Office for Students and UK Research and Innovation (including Research England) have been applied in accordance with the relevant terms and conditions.

Under the Office for Students' Accounts Direction, we are required to report to you, if we have anything to report in respect of the following matters:

- The College's grant and fee income, as disclosed in Note 4 to the financial statements, has been materially misstated; or
- The College's expenditure on access and participation activities for the financial year, as disclosed in Note 11 to the financial statements, has been materially misstated.

We have no matters to report arising from this responsibility.

PricewaterhouseCoopers LLP

Chartered Accountants and Statutory Auditors
London, 21 November 2023



Julia Lin, Final year MEng Biomedical Engineering student, building a robot for the simulation of flying insects as targets.

FINANCIAL STATEMENTS

Statement of comprehensive income and expenditure

Year ended 31 July 2023

	Note	Consolidated		College	
		Year ended 31 July 2023 £m	Year ended 31 July 2022 £m	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m
Income					
Tuition fees and education contracts	1	452.1	423.2	452.1	423.2
Funding body grants	2	183.3	151.7	183.3	151.7
Research grants and contracts	3	383.1	368.4	383.1	368.4
Other income	5	172.4	148.4	162.3	141.4
Investment income	6	26.4	7.2	24.1	7.5
Donations and endowments	7	51.5	64.4	51.5	64.4
Total income		1,268.8	1,163.3	1,256.4	1,156.6
Expenditure					
Staff costs	8, 10	646.1	603.5	642.7	600.0
Pension provisions	8, 22	(0.2)	152.1	(0.2)	152.1
Other operating expenses	10	475.8	393.6	474.4	392.0
Depreciation and amortisation	10, 12, 13	91.9	91.2	91.3	90.7
Interest and other finance costs	9, 10	26.5	19.1	26.5	19.1
Total expenditure		1,240.1	1,259.5	1,234.7	1,253.9
Surplus/(deficit) before other gains/(losses) and share of operating results of joint ventures and associates		28.7	(96.2)	21.7	(97.3)
Loss on disposal of fixed assets		(6.1)	(11.4)	(6.1)	(11.4)
(Loss)/gain on disposal of non-current investments		(0.1)	2.0	(0.1)	2.0
Gain/(loss) on investments	14	7.7	(17.9)	22.2	(17.9)
Share of operating surplus/(deficit) in joint ventures		0.7	(0.1)	-	-
Surplus/(deficit) before tax		30.9	(123.6)	37.7	(124.6)
Taxation		-	-	-	-
Surplus/(deficit) for the year		30.9	(123.6)	37.7	(124.6)
Total comprehensive income/(expenditure) for the year		30.9	(123.6)	37.7	(124.6)
Represented by:					
Endowment comprehensive income for the year		0.5	17.5	0.5	17.5
Restricted comprehensive (expenditure)/income for the year		(0.8)	22.7	(0.8)	12.2
Unrestricted comprehensive income/(expenditure) for the year		31.2	(163.8)	38.0	(154.3)
		30.9	(123.6)	37.7	(124.6)

All items of income and expenditure relate to continuing activities. There are no additional items recognised in other comprehensive income.

Statement of financial position

Year ended 31 July 2023

	Note	Consolidated		College	
		Year ended 31 July 2023 £m	Year ended 31 July 2022 £m	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m
Non-current assets*					
Intangible assets	12	54.7	53.6	54.7	53.6
Fixed assets	13	1,609.9	1,576.9	1,600.0	1,567.1
Investments	14	744.2	733.9	794.3	776.5
Investments in joint ventures	15	6.3	7.3	-	-
		2,415.1	2,371.7	2,449.0	2,397.2
Current assets					
Stock		0.2	0.2	0.2	0.2
Trade and other receivables	17	407.7	346.0	410.0	349.4
Investments	18	49.2	49.7	49.2	49.7
Cash and cash equivalents		348.1	367.8	320.3	345.4
		805.2	763.7	779.7	744.7
Creditors: amounts falling due within one year	19	(702.5)	(633.9)	(685.0)	(621.3)
Net current assets		102.7	129.8	94.7	123.4
Total assets less current liabilities		2,517.8	2,501.5	2,543.7	2,520.6
Creditors: amounts falling due after more than one year	20	(504.7)	(510.8)	(504.7)	(510.8)
Provisions					
Pension provisions	22	246.4	254.9	246.4	254.9
Other provisions	22	0.7	0.7	0.7	0.7
Total net assets		1,766.0	1,735.1	1,791.9	1,754.2
Restricted Reserves					
Endowment income and expenditure reserve	23	220.1	219.6	220.1	219.6
Restricted income and expenditure reserve	24	106.4	107.2	106.4	107.2
Unrestricted Reserves					
Unrestricted income and expenditure reserve		1,439.5	1,408.3	1,465.4	1,427.4
Total Reserves		1,766.0	1,735.1	1,791.9	1,754.2

*Figures as at 31 July 2022 have been reclassified to disclose intangible assets and fixed assets separately, with no change in the total reported (see Note 12).

The financial statements were approved by the Council on 21 November 2023 and were signed on its behalf on that date by:

Mr John Allan CBE,
Chair of Council

Professor Hugh Brady,
President

Statement of changes in reserves

Year ended 31 July 2023

	Income and expenditure account			Total
	Endowment £m	Restricted £m	Unrestricted £m	£m
Consolidated				
Balance at 1 August 2021	202.1	84.5	1,572.1	1,858.7
Surplus/(deficit) from the income and expenditure statement	17.5	43.0	(184.1)	(123.6)
Release of restricted funds spent in year	-	(20.3)	20.3	-
Total comprehensive income/(expenditure) for the year ended 31 July 22	17.5	22.7	(163.8)	(123.6)
Balance at 31 July 2022	219.6	107.2	1,408.3	1,735.1
Surplus/(deficit) from the income and expenditure statement	0.5	56.1	(25.7)	30.9
Release of restricted funds spent in year	-	(56.9)	56.9	-
Total comprehensive income/(expenditure) for the year ended 31 July 23	0.5	(0.8)	31.2	30.9
Balance at 31 July 2023	220.1	106.4	1,439.5	1,766.0
College				
Balance at 1 August 2021	202.1	95.0	1,581.7	1,878.8
Surplus/(deficit) from the income and expenditure statement	17.5	32.5	(174.6)	(124.6)
Release of restricted funds spent in year	-	(20.3)	20.3	-
Total comprehensive income/(expenditure) for the year ended 31 July 22	17.5	12.2	(154.3)	(124.6)
Balance at 31 July 2022	219.6	107.2	1,427.4	1,754.2
Surplus/(deficit) from the income and expenditure statement	0.5	56.1	(18.9)	37.7
Release of restricted funds spent in year	-	(56.9)	56.9	-
Total comprehensive income/(expenditure) for the year ended 31 July 23	0.5	(0.8)	38.0	37.7
Balance at 31 July 2023	220.1	106.4	1,465.4	1,791.9

Consolidated statement of cash flows

Year ended 31 July 2023

	Note	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m
Cash flow from operating activities			
Surplus/(deficit) for the year before taxation		30.9	(123.6)
Taxation		-	-
Surplus/(deficit) for the year after taxation		30.9	(123.6)
Adjustment for non-cash items and working capital movements			
Depreciation	13	88.6	91.2
Amortisation of intangibles	12	3.3	-
(Gain)/loss on investments	14	(7.7)	17.9
(Increase) in stock		-	(0.1)
(Increase) in debtors		(59.5)	(28.0)
Increase/(decrease) in creditors		60.4	(4.5)
(Decrease)/increase in pension provisions		(16.8)	146.1
(Decrease) in other provisions		(0.1)	(1.4)
Share of operating (surplus)/deficit in joint venture		(0.7)	0.1
Unrealised foreign currency losses/(gains)		1.0	(2.2)
Other non-cash items		2.9	1.2
Adjustment for investing or financing activities			
Investment income	6	(26.4)	(7.2)
Interest payable	9	26.5	19.1
Endowment income		(3.6)	(27.3)
Loss on disposal of fixed assets and non-current investments		6.2	9.4
Capital income		(48.6)	(36.1)
		56.4	54.6
Cash flow from investing activities			
Capital receipts		49.1	41.1
Disposal of fixed assets		-	(9.7)
Proceeds from sales of investment property		2.3	9.4
Disposal of other non-current investments		19.6	16.1
Withdrawal of deposits		1.1	-
Investment income		19.6	1.6
Payments made to acquire fixed assets		(116.8)	(57.1)
Payments made to acquire intangible assets		(4.4)	-
Payments to acquire joint venture share capital		-	(1.2)
New non-current investments		(18.6)	(27.9)
New current asset investments		(0.6)	(0.3)
		(48.7)	(28.0)
Cash flow from financing activities			
Interest paid		(13.5)	(13.4)
Interest element of finance lease payments		(4.7)	(4.7)
New endowments		3.2	8.4
Repayments of amounts borrowed		(10.2)	(10.2)
Capital element of finance lease payments		(1.2)	(0.9)
		(26.4)	(20.8)
(Decrease)/increase in cash and cash equivalents in the year		(18.7)	5.8
Cash and cash equivalents at beginning of the year		367.8	359.8
(Decrease)/increase in cash and cash equivalents in the year		(18.7)	5.8
Exchange (losses)/gains on cash and cash equivalents		(1.0)	2.2
Cash and cash equivalents at end of the year		348.1	367.8

Statement of principal accounting policies

1. Basis of preparation

These financial statements have been prepared in accordance with the United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 “The Financial Reporting Standard applicable in the UK and Republic of Ireland”, and applicable law), the Statement of Recommended Practice (SORP): Accounting for Further and Higher Education (2019) and the OfS Accounts Direction (OfS 2019.41).

The College is a public benefit entity and therefore has applied the relevant public benefit requirements of the United Kingdom Generally Accepted Accounting Practice. The financial statements are prepared under the historical cost convention (modified by the revaluation of marketable non-current asset investments and investment properties). The accounting policies have been applied consistently year on year.

The College’s and consolidated forecasts and projections, taking account of reasonably possible changes in performance, including the current high level of inflation and related cost increases, show that the College should be able to operate within the level of its current facilities. In arriving at its assessment, Council have considered a period of 12 months from the date the financial statements were signed. In developing this assessment, Council have noted that the College successfully enrolled a record number of students whilst research income has continued to increase. Council have also noted that the College has significant investment balances that could be liquidated if required to address any liquidity shortfall. Forecasts and projections show that the downside risk to cashflow in a severe but plausible downside scenario is manageable and the risk of breaching covenants imposed by lenders is considered low. No breaches of covenants imposed by lenders have been forecast, but any potential breach would be identified well in advance through covenant testing and appropriate action could be taken. Therefore, Council have a reasonable expectation that the College has adequate resources to continue in operational existence for the foreseeable future. The College therefore continues to adopt the going concern basis of accounting in preparing its financial statements.

2. Basis of consolidation

The consolidated financial statements include the College and all its subsidiaries for the financial year to 31 July 2023. The results of subsidiaries acquired or disposed of during the period are included in the consolidated statement of comprehensive income

and expenditure from the date of acquisition, or up to the date of disposal. Intra-group transactions are eliminated on consolidation. In preparing its own financial statements, the College has applied the exemptions available under FRS 102 to disclose neither a cash flow statement, nor related party transactions with wholly-owned subsidiaries. Similarly, an exemption has been taken from disclosing details of the College’s financial instruments as the consolidated position is presented in these financial statements.

Associated companies and joint ventures are accounted for using the equity method in the consolidated financial statements. Associated companies are those in which the College has a significant, but not dominant, influence over their commercial and financial policy decisions. Joint ventures represent entities over which the College has joint control with a third party. During the financial year to 31 July 2023 the College has no associated companies and one joint venture, Scale Space LLP, more information on which can be found in Note 15.

3. Income recognition

Income from the sale of goods or services is credited to the consolidated statement of comprehensive income and expenditure when the goods or services are supplied to the external customers or the terms of the contract have been satisfied.

Tuition fee income is stated gross of any expenditure which is not a discount and credited to the consolidated statement of comprehensive income and expenditure over the period in which students are studying. Where the amount of the tuition fee is reduced, income receivable is shown net of the discount. Bursaries and scholarships are accounted for gross as expenditure and not deducted from income.

Government grants are credited to the consolidated statement of comprehensive income and expenditure when the College is entitled to the income and any performance-related conditions have been met. Where multiple performance conditions exist, the amount of income recognised reflects the income due for performance conditions met.

Income from research grants and contracts is credited to the consolidated statement of comprehensive income and expenditure when the College is entitled to the income and any performance-related conditions have been met.

Income received before performance-related conditions have been met is deferred on the statement of financial position and released to the

consolidated statement of comprehensive income and expenditure in line with such conditions being met. This is ordinarily when the College undertakes research and incurs the related expense.

Funds the College receives and disburses as paying agent on behalf of a funding body are excluded from the consolidated statement of comprehensive income and expenditure where the College is exposed to minimal risk or enjoys minimal economic benefit related to the transaction.

Donations and endowments (a form of charitable trust retained for the benefit of the College) with donor-imposed restrictions are credited to the consolidated statement of comprehensive income and expenditure when the College is entitled to the income. This income is retained within the restricted reserve, with additional disclosures provided within the notes to the financial statements, until such time that it is utilised in line with such restrictions at which point the reserve is reduced to the extent the income has been consumed or restrictions met. There are four main types of donations and endowments identified within reserves:

1. Restricted donations – the donor has specified that the donation must be used for a particular objective.
2. Restricted permanent endowments – the donor has specified that the fund is to be permanently invested to generate an income stream to be applied to a particular objective.
3. Unrestricted permanent endowments – the donor has specified that the fund is to be permanently invested to generate an income stream for the general benefit of the College.
4. Expendable endowments – the donor has specified a particular objective and the College has the power to use the capital.

Donations with no restrictions are recognised in the consolidated statement of comprehensive income and expenditure when the College is entitled to the income.

All investment income from deposits and endowments is recorded in income in the period in which it is earned and as either restricted or unrestricted income according to the terms of the restriction applied to the individual endowment fund. Investment income from endowments not expended in accordance with the restrictions of the endowment is held within the temporarily or permanently restricted reserve as appropriate until such time that it is utilised in line with such restrictions.

4. Pension schemes

The College participates in three active pension schemes: the Universities Superannuation Scheme (USS), the Superannuation Arrangements of the University of London (SAUL) and the NHS Pension Scheme. The College also participates in the legacy Federated Pension Scheme 1634 (FPS) on behalf of retired members.

The USS, SAUL and NHS schemes are multi-employer schemes, with SAUL and NHS being defined benefit and USS a hybrid scheme. Given the mutual nature of the schemes, it is not possible to identify the College's share of the underlying assets and liabilities. Consequently, the College cannot apply defined benefit accounting and, according to section 28 FRS 102, the schemes are accounted for as defined contribution schemes. Each scheme is valued every three years, apart from the NHS scheme, which is valued every four years, by professionally qualified independent actuaries.

The College has entered into an agreement with regards to the USS scheme that determines how each employer within the scheme will fund the overall deficit of the scheme. The College recognises a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and therefore an expense is recognised in the consolidated statement of comprehensive income and expenditure.

5. Short-term employment benefits

Short-term employment benefits such as salaries and compensated absences are recognised as an expense in the year in which the employees render service to the College. Any unused benefits, such as holiday entitlements earned but not taken at the reporting date, are recognised as a liability by the College at the undiscounted additional amount the College would expect to pay as a result. Termination benefits are recognised as an expense in the consolidated statement of comprehensive income and expenditure when incurred.

Statement of principal accounting policies *(continued)*

6. Foreign currencies

Transactions denominated in foreign currencies are translated to the respective functional currencies of Group entities at the rate of exchange ruling at the dates of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the foreign exchange rate at the reporting date.

The resulting exchange differences are recognised in the consolidated statement of comprehensive income and expenditure.

7. Finance leases

Leases which transfer substantially all of the risks and rewards of ownership of the leased asset are classified as finance leases. Leased assets acquired under finance leases, together with the related lease liability, are recorded in the consolidated statement of financial position at the inception of the lease at the lower of their fair value and the present value of the minimum lease payments.

Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Assets leased from the College under finance leases are removed from the consolidated statement of financial position and replaced with a receivable at an amount equal to the present value of the sum of the minimum lease payments due and any residual value at the end of the lease term. Deferred lease premiums arising on sale and leaseback transactions are spread over the term of the finance lease.

8. Operating leases

Leases which do not transfer substantially all of the risks and rewards of ownership of the leased asset are classified as operating leases. Operating lease costs and income are recognised in the consolidated statement of comprehensive income and expenditure on a straight-line basis over the relevant lease term. Any lease premiums or incentives are spread over the minimum lease term.

9. Land and buildings

Initially, purchased land and purchased or constructed buildings are stated at cost. Subsequently, freehold land is not depreciated as it is considered to have an indefinite useful

life. Leasehold land is depreciated over the life of the lease. Buildings, including service plant, are depreciated over their expected useful lives as follows:

Building works:	50 years
Service plant:	20 years
Building infrastructure:	20 years

Costs incurred in relation to buildings after their initial acquisition or construction are capitalised only to the extent that they increase the expected future benefits beyond the previously assessed standard of performance. The cost of such works is depreciated over 20 years.

Assets under construction are capitalised at cost and not depreciated until they are available for use.

10. Fixtures, fittings and equipment

Fixtures, fittings and equipment, including IT hardware, costing less than £50,000 per individual item or group of related items are written off in the year of acquisition. All other items are capitalised. Costs capitalised include those that are required to bring the asset to the location and condition necessary for it to operate in the manner intended.

Capitalised equipment is stated at cost and, once in service, depreciated over their useful economic lives as follows:

Fixture, fittings and infrastructure:	20 years
Equipment and IT:	5 to 8 years

Equipment acquired for specific research projects is depreciated over its expected useful economic life which ordinarily equates to the remaining life of the project (generally three years up to a maximum of eight years). Where fixtures, fittings and equipment are acquired with the aid of specific grants they are capitalised and depreciated as above. The related grant is recognised in income on entitlement.

11. Intangible assets

Software costs, including development costs relating to internally generated intangible assets, are capitalised where they are deemed necessary to create, produce and prepare the asset to be capable of operating in the manner intended by the College and can be reliably measured. Related research costs are recognised in the Statement of comprehensive income and expenditure when the expense is incurred.

All assets costing less than £50,000, per

individual item or group of related items, are written off in the year of acquisition.

Capitalised intangible assets are stated at cost and, once in service, amortised over their useful economic lives using the straight-line method. Where a reliable estimate of the expected useful life of an asset cannot be made, it is assumed to be eight years.

The College has a contractual right to access research facilities at the Francis Crick Institute. This asset is held at historical cost and amortised over a useful economic life of 50 years.

12. Reserves

The reserves reflect the accumulated net comprehensive income of the College. This accumulated net income is classified as either restricted or unrestricted depending on whether restrictions were placed on how it was to be spent. Income with such restrictions remains in the restricted reserves until it is spent in line with the restriction, at which point it is transferred to the unrestricted reserve via a reserve transfer.

Endowment funds are a form of charitable trust retained for the benefit of the College. Where the donor prohibits the conversion of the capital into income, these funds are held in a permanent restricted reserve. Otherwise, these are held temporarily in restricted reserves.

13. Investment properties

Investment properties are those land and building assets which are held for either their rental income, capital appreciation or both. Investment properties are initially recognised at cost in the statement of financial position and subsequently at their fair value on the basis of an independent valuation at each statement of financial position date. Changes in the fair value of investment properties are recognised within the consolidated statement of comprehensive income and expenditure.

Property held primarily for the provision of social benefit is not classified as investment property (for example student accommodation), in accordance with FRS 102.

14. Financial Instruments

A financial instrument is a contract that gives rise to a financial asset in one entity and a financial liability or equity instrument in another. Financial assets and financial liabilities are recognised when the College becomes a party to the contractual provisions of the instrument. All financial

instruments held by the College are basic financial instruments.

The non-current investment assets held by the College are not expected to realise their value within the next twelve months from the date of the consolidated statement of financial position. These assets, together with their corresponding treatments, are as follows:

- Listed equity are financial instruments that are traded on a recognised stock exchange. They are held at fair value.
- Non-listed investment are shares that are not traded on a recognised stock exchange. They are held at fair value when regular, reliable valuations are available, for example private equity funds. Where such valuations are unavailable, including for equity holdings in private companies, investments are held at historic cost less any provision for impairment.

The current investment assets held by the College are deposits with banks and building societies with maturity between three and twelve months at the date of acquisition. These are held at their cost less any provision for impairment in their value.

Cash includes cash in hand, deposits repayable on demand and overdrafts. Deposits are repayable on demand if they are available within twenty-four hours without penalty. Cash equivalents are highly liquid investments due within three months, that are readily convertible to known amounts of cash and that are subject to insignificant risk of changes in value.

Unsecured loans are liabilities with fixed or determinable payments that are not secured against specific assets. These are held at amortised cost. They are apportioned between 'Creditors: amounts falling due within one year' and 'Creditors: amounts falling due after more than one year'.

Trade receivables and trade payables are recognised at their transaction price in the statements of consolidated financial position and subsequently measured at amortised cost. A provision for bad debts is estimated on the basis that as debts become older, a higher percentage become irrecoverable.

Investments in joint ventures, associated companies and subsidiaries are recognised at cost less any provision for impairment in the College's individual statement of financial position.

Amortised cost is a method used to measure the value of certain financial assets and liabilities after they have been initially recognised. The amortised cost of a financial instrument is the net of the amount the instrument was initially recognised at, less any repayment of the principal,

Statement of principal accounting policies *(continued)*

plus or minus the cumulative amortisation of any difference between the amount at initial recognition and the maturity amount, minus – in the case of financial assets – any reduction for impairment or uncollectability.

Any changes in market value, fair value or resulting from impairment are recognised immediately in the consolidated statement of comprehensive income and expenditure.

15. Taxation status

The College is an exempt charity within the meaning of Schedule 3 of the Charities Act 2011 and as such is a charity within the meaning of Para 1 of Schedule 6 to the Finance Act 2010. Accordingly, the College is potentially exempt from taxation in respect of income or capital gains received within categories covered by Sections 478-488 of the Corporation Tax Act 2010 (CTA 2010) or Section 256 of the Taxation of Chargeable Gains Act 1992 to the extent that such income or gains are applied to exclusively charitable purposes. The College receives no similar exemption in respect of Value Added Tax (VAT).

The College's subsidiary companies are subject to corporation tax and VAT in the same way as any commercial organisation. The charge for taxation is based on the profit or loss for the year after charging the cost of any Gift Aid payment payable to the College. The charge for taxation also takes into account taxation deferred because of timing differences in the treatment of certain items for taxation and accounting purposes.

16. Heritage assets

Heritage assets are tangible and intangible assets with historic, artistic, scientific, technological, geophysical or environmental qualities that are held and maintained principally for their contribution to knowledge and culture. Assets are held at cost where this is known or can be obtained from historic records, less accumulated impairment losses. Heritage assets are not depreciated as their long economic life and high residual value mean that any depreciation would not be material.

17. Provisions and contingent liabilities

Provisions are recognised in the consolidated statement of financial position when:

- (a) the College has a present obligation (legal or constructive) as a result of a past event;
- (b) it is probable that an outflow of economic benefits will be required to settle the obligation; and

- (c) a reliable estimate can be made of the amount of the obligation.

Where the impact is material, the value of the provision is determined by discounting the expected future cash flows to reflect the time value of money.

A contingent liability arises from a past event that gives the College a possible obligation whose existence will only be confirmed by the occurrence or non-occurrence of uncertain future events not wholly within the control of the College.

Contingent liabilities also arise in circumstances where a provision would otherwise be made but either it is not probable that an outflow of resources will be required or the amount of the obligation cannot be measured reliably. Contingent liabilities are not recognised in the consolidated statement of financial position as a liability, however disclosure is made unless the possibility of an outflow of resources is remote.

18. Accounting judgements and estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the accounting policies.

The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are below:

Critical sources of estimation uncertainty

Investment property – The valuation of the College's investment property portfolio is inherently subjective due to, among other factors, the individual nature of each property, its location and the expected future rental revenues from that particular property. As a result, the valuations the College places on its investment property portfolio are subject to a degree of uncertainty and are made on the basis of assumptions which may not prove to be accurate, particularly in periods of volatility or low transaction flow in the property market. The investment property valuations contain a number of assumptions upon which the College's independent professional valuer has based its valuation of the portfolio. The assumptions on which the property valuation reports have been based include, but are not limited to, matters such as the tenure and tenancy details for the properties, ground conditions at the properties, the structural condition of the properties, prevailing market yields and comparable market transactions. In the year to 31 July 2023 the College's portfolio of investment property was valued at £253.0 million (2022: £261.9 million).

USS pensions provision – A provision is recognised in the financial statements for future contributions payable to the USS pension scheme that relate to the deficit in the scheme. It arises from the agreement with scheme employers as to how the deficit is funded. The carrying amount of this liability on 31 July 2023 is £246.4 million (see Note 22). Assumptions used in the calculation represent a key source of estimation uncertainty. These assumptions and an analysis of the sensitivity of the provision to changes in these assumptions are also included in Note 22.

Annual holiday accrual – An accrual is recognised in the financial statements for holiday leave that has been accrued by employees but not yet taken as at 31 July 2023, the carrying amount of which is £12.3 million (2022: £11.8 million). There is judgement involved in estimating the number of days owed and an average number of 10 days (2022: 10 days) is applied in some circumstances. Increasing or decreasing the average number used by 2 days would result in a change of £1.1 million to the liability.

Impairment of investments in subsidiaries – Investments in subsidiaries are recognised at cost less any provision for impairment in the College's individual statement of financial position. In the year to 31 July 2023, the College's investments in subsidiaries were valued at £107.6 million (2022: £35.1 million).

Where an indication of impairment exists, the College measures the recoverable amount of its investment at the higher of its fair value less costs to sell and its value in use. Where the recoverable amount is lower than the carrying value, an impairment loss is recognised in the Statement of comprehensive income and expenditure. There is significant judgement involved in determining the recoverable amount of a subsidiary as an active market does not always exist. Forecasts of future cashflows are used to calculate a subsidiary's value in use and incorporate a number of assumptions about future performance driven by the unique circumstances of each subsidiary. Where a fair value approach is taken, reference is made to valuations of assets derived in accordance with commonly used industry principles to determine the recoverable amount of the subsidiary's assets. An indication of impairment was identified in relation to One Portal Way Limited due to a fall in the fair value of the investment property held by the company. The recoverable amount of the company was calculated using the net assets of the company less costs to sell resulting in an impairment of £12.6 million. This has been offset by a partial reversal of a prior year impairment of £3.1 million related to another

subsidiary, Imperial College Innovations Limited, which was due to an increase in the fair value of the assets held by that company.

Critical accounting judgements

The College's interest in the Francis Crick Institute – In 2011, the College made an investment of £40 million in the Francis Crick Institute (the Institute) for which it received shares, as well as certain contractual rights to access the research facilities at the Institute through a joint venture agreement entered into when the shares were received. There is significant judgement involved in how to account for the asset and the College has previously classified it as a non-current investment in accordance with the shares held. The asset was impaired annually on the basis that the benefits obtained from the arrangement were expected to be consumed over the remaining period of the joint venture agreement. During the reporting period, the College reassessed the accounting treatment of its interest in the Institute and concluded it would be more appropriate to classify the asset as an intangible asset on the basis that the substance of the asset acquired was the access right to research facilities for the remaining length of the joint venture agreement with the shares obtained being of nominal value. Further information on this can be found in Note 12. As at 31 July 2023, the College's interest in the Institute was valued at £34.6 million.

Notes to the financial statements

Year ended 31 July 2023

1. Tuition fees and education contracts

	Registered student numbers		Consolidated		College	
	31 December 2022	31 December 2021	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m
Full-time students: home fee status						
Undergraduate	7,289	7,482	64.9	66.3	64.9	66.3
Taught postgraduate	1,130	1,220	21.1	22.0	21.1	22.0
Research postgraduate	2,599	2,790	3.1	3.6	3.1	3.6
Full-time students: overseas fee status						
Undergraduate	4,672	4,238	157.7	136.6	157.7	136.6
Taught postgraduate	3,448	3,309	115.3	106.6	115.3	106.6
Research postgraduate	1,899	1,710	30.5	27.8	30.5	27.8
Part-time students: home fee status	1,152	1,267	7.6	9.5	7.6	9.5
Part-time students: overseas fee status	842	775	12.8	12.0	12.8	12.0
Other fees and education contracts						
Research Training Support Grants			25.9	29.7	25.9	29.7
Short course fees			13.2	9.1	13.2	9.1
			452.1	423.2	452.1	423.2

Fee income is shown net of discounts and fees remitted. Home fee status includes EU students in later years of study who entered on the old home/EU fee rate.

Research training support grants include £3.0 million (2022: £3.6 million) of tuition fees paid in respect of postgraduate students. The remainder represents grants made by Research Councils and other bodies in support of training research students.

Total numbers of full-time and part-time students are 23,031 in 2023 and 22,791 in 2022 (excluding those on short courses). Tuition fee categories are based on fee status established at the time of initial application.

2. Funding body grants

	Consolidated		College	
	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m	Year ended 31 July 2023 £m	Year ended 31 July 2022 £m
Grants from OfS				
Recurrent - teaching	25.4	25.0	25.4	25.0
Capital	1.4	2.0	1.4	2.0
Grants from Research England				
Recurrent - research	113.2	102.7	113.2	102.7
Capital	18.0	12.1	18.0	12.1
Higher Education Innovation Fund	6.7	5.7	6.7	5.7
Other	6.3	4.2	6.3	4.2
Other government grants	12.3	-	12.3	-
	183.3	151.7	183.3	151.7

Other government grants comprise funding awarded through Public Sector Decarbonisation Scheme for energy efficiency and heat decarbonisation project.

3. Research grants and contracts

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Research Councils	131.0	124.4	131.0	124.4
Charities	79.4	77.4	79.4	77.4
Government (UK & EU) and health authorities	64.4	63.3	64.4	63.3
European Commission	28.5	34.1	28.5	34.1
Industry and commerce	53.2	47.8	53.2	47.8
Other	26.6	21.4	26.6	21.4
	383.1	368.4	383.1	368.4

Research grants and contracts income includes £10.7 million (2022: £11.0 million) in respect of capital funding and £80.4 million (2022: £79.1 million) in respect of overhead contribution.

4. Grant and fee income

	Note	Consolidated		College	
		Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
		£m	£m	£m	£m
Grant income from the OfS	2	26.8	27.0	26.8	27.0
Grant income from Research England	2	144.2	124.7	144.2	124.7
Grant income from other bodies	2, 3	236.2	221.8	236.2	221.8
Fee income for taught awards		378.0	351.4	378.0	351.4
Fee income for research awards		35.0	33.0	35.0	33.0
Fee income from non-qualifying courses	1	39.1	38.8	39.1	38.8
		859.3	796.7	859.3	796.7

Grant income from other bodies comprises a decarbonisation government grant (Note 2) and research awards from Research Councils, government and health authorities, and European Commission (Note 3).

Fee income for taught awards represents fee income for higher education courses and includes undergraduate and postgraduate taught awards. Fee income for research awards represents postgraduate research awards excluding grants made by Research Councils and other bodies in support of the training of research students. Fee income from non-qualifying courses represents fees for non-credit-bearing courses and research training support.

Notes to the financial statements

Year ended 31 July 2023

5. Other income

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Residences, catering and conferences	58.5	47.9	58.5	47.9
Consultancies and scientific services	24.1	22.9	9.7	9.2
Health and hospital authorities	27.6	26.3	27.6	26.3
Rents receivable from commercial property	22.2	18.7	12.9	13.6
Other revenue grants	7.2	7.0	7.6	7.1
Other departmental income	16.4	13.5	21.0	19.1
Other income	16.4	12.1	25.0	18.2
	172.4	148.4	162.3	141.4

Residences and catering income is mainly from undergraduate and postgraduate student accommodation rental, including vacation lettings. Rental from other non-core property, not required for the core academic mission of the College, is shown under rental income from commercial property.

Consultancies and scientific services relate to projects undertaken by College staff, through subsidiary companies, for commercial exploitation of research facilities and for project management services. Other projects funded by grants with performance-related conditions are shown within Other revenue grants. Health and hospital authorities income relates to recharges for staff employed by the College where some of their salaries are reimbursed by the NHS for their work at NHS Trusts.

Other departmental income includes income related to activities undertaken by academic departments, such as collaborations with other universities and third parties, application fees, marketing and intellectual property income.

Other income is received by non-academic departments for a range of services and facilities they provide, for example sport, car parking and Early Years Education Centre.

The College was awarded £0.6 million through the Turing Scheme, the UK government's programme to provide funding for international opportunities in education and training (2022: £0.4 million). As at 31 July 2023, £0.5 million of this funding had been used as part of other revenue grants in the year (2022: £0.2 million). The Turing funding cycle runs from 1 September to 31 August each year.

6. Investment income

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Interest and investment income on endowments	2.4	1.5	2.4	1.5
Other investment income	8.2	3.6	5.4	3.6
Interest on cash, cash equivalents and current investments	15.8	2.1	16.3	2.4
	26.4	7.2	24.1	7.5

Investment income consists of interest received on cash balances and deposits, and income earned on endowment and other investment assets. Other investment income also includes profits on disposal of spinout companies, with £4.2 million realised in the year.

7. Donations and endowments

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
New endowments	3.6	27.3	3.6	27.3
Donations with performance-related conditions	4.0	4.9	4.0	4.9
Research donations	21.4	12.6	21.4	12.6
Capital donations	6.1	10.9	6.1	10.9
Other donations with restrictions	13.4	6.5	13.4	6.5
Unrestricted donations	3.0	2.2	3.0	2.2
	51.5	64.4	51.5	64.4

Where the College has a pledge supported either by a legal deed or a letter, the income is recognised on pledge, apart from donations with performance-related conditions where income is only recognised on fulfilment of conditions specified in the gift agreements. College secured total pledges and philanthropic donations of £58.8 million in the year (2022: £52.7 million).

8. Staff costs

	Note	Consolidated		College	
		Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
		£m	£m	£m	£m
Staff costs					
Salaries		513.9	476.0	510.5	472.5
Social security costs		57.6	53.6	57.6	53.6
Other pension costs	31	73.9	72.4	73.9	72.4
Restructuring costs		0.7	1.5	0.7	1.5
		646.1	603.5	642.7	600.0
Pension provisions					
USS	22	(0.2)	152.1	(0.2)	152.1
		(0.2)	152.1	(0.2)	152.1
		645.9	755.6	642.5	752.1

Staff costs include £0.6 million increase in accrual for unpaid leave (2022: £5.0 million reduction). These changes arise due to a change in the amount of untaken leave at 31 July each year.

	Full-Time Equivalent (FTE)		Headcount	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	Staff numbers by major category			
Academic and Research	3,685	3,640	3,963	3,925
Professional services	3,258	3,126	3,423	3,290
Technical services	479	492	490	507
Operational services	341	316	421	383
Learning & Teaching	370	363	520	499
	8,133	7,937	8,817	8,604

The FTE number is based on the headcount but adjusted to include only the pro rata element of part-time staff. The numbers include staff employed by the subsidiary companies.

Notes to the financial statements

Year ended 31 July 2023

8. Staff costs (continued)

Remuneration of the President	Year ended 31 July 2023	Year ended 31 July 2022
	£000	£000
	Hugh Brady	Alice P.Gast
Pay and pensions		
Basic salary	375	365
Housing allowance	76	-
Relocation allowance	1	-
Payments in lieu of pension contributions	-	47
Pension contributions to USS	24	20
Holiday in lieu	-	13
Total pay and pensions	476	445
Provision of College accommodation		
Taxable benefit	-	153
Non-taxable benefit	-	1
College payments for tax on accommodation	-	115
Total accommodation	-	269
Total remuneration	476	714
	Year ended 31 July 2023	Year ended 31 July 2022
President's remuneration as multiple of the median pay for all other employees (on a FTE basis)		
Multiple based on basic salary	8.6	8.6
Multiple based on total remuneration excl. accommodation	9.2	9.2
Multiple based on total remuneration	9.2	14.7

The College is committed to offering all staff, including the President, a total remuneration package that is equitable and appropriately reflects the market in which the College seeks to attract and retain talent. Imperial is one of the world’s top 10 academic institutions, competing and collaborating globally, and the President is the College’s most senior executive with ultimate responsibility for the performance, reputation and success of the organisation. A prerequisite of the role is senior leadership experience in similar world-class organisations, a strong academic record and extensive experience in fundraising. The total remuneration offered is set with reference to this global marketplace and is then benchmarked against peers.

Professor Hugh Brady became President of Imperial College on 1 August 2022. His basic pay is £375,000. He has a total remuneration package of £476,000, which includes a housing allowance of £76,375, relocation allowance of £1,142 and employer’s pension contributions of £23,625. This remuneration package was agreed upon by members of the Remuneration Committee following a review of benchmarking data, including UK and international peer institutions. He is responsible for all relevant taxes on this remuneration and does not live in College accommodation.

During her tenure, which ended on 31 July 2022, President Gast lived in College accommodation on campus. The taxable benefit of the accommodation was based on estimated market prices provided by a third party assessment and calculated in line with the established methodology for valuing the taxable benefit. This valued the taxable benefit in 2022 at £135,335. An additional taxable benefit of £17,343 is related to the cost of providing utilities, cleaning, maintenance and furnishings for the accommodation.

As the accommodation is owned by the College, the actual cost of providing this as a landlord in 2022 was £1,425, which was a non-taxable benefit to President Gast.

The Remuneration Committee agreed that the College should pay the tax charge on the taxable benefit of the accommodation to maintain the value of President Gast’s cash remuneration, as the terms of the provision of accommodation had been agreed upon prior to agreeing with the HMRC that the benefit was taxable.

Compensation for loss of office

Payments in respect of loss of office comprise termination payments paid directly to individuals in respect of loss of office, plus contributions made towards legal expenses. All compensation in respect of loss of office has been internally funded by the College.

	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m
Compensation payable recorded within staff costs	1.0	1.4

Payments for compensation for loss of office were payable to 230 employees in 2023 (2022: 260). Of this, a total of £162,108 (2022: Nil) was paid in severance payments to staff that earned in excess of £100,000 per annum (4 in 2023, Nil in 2022).

Notes to the financial statements

Year ended 31 July 2023

8. Staff costs (continued)

Key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the College and the Group. Staff costs include compensation paid to key management personnel.

Key management personnel comprises members of the University Management Board (President's Board and the Provost's Board in 2022). The Boards had combined membership for the year ended 31 July 2023 standing at 15.3 FTE (2022: 21.6 FTE).

	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m
Key management personnel compensation	5.2	6.5

Compensation includes all employee benefits, and all forms of consideration paid, payable or provided by the College in exchange for services to the College. It comprises salaries and benefits of £4.2 million (2022: £5.3 million), employer's NI contributions of £0.6 million (2022: £0.7 million) and employer's pension contributions of £0.4 million (2022: 0.5 million).

Trade Union (Facility Time Publication Requirements) Regulations

Facility Time is the provision of paid or unpaid time off from an employee's normal role to undertake Trade Union duties and activities as a Trade Union representative. There is a statutory entitlement to reasonable paid time off for undertaking union duties.

The number of College employees who were Trade Union Reps during the period 1 April 2022 to 31 March 2023 was 19 (2022: 14); these were all full-time College employees. The percentage of time spent by them on Facility Time fell in the 1 - 50% band. The cost of this activity amounts to £175,274 (2022: £140,598) representing 0.02% (2022: 0.02%) of the total pay bill in the relevant period. Of the total paid Facility Time, the proportion of hours spent on paid Trade Union activities (i.e. activities other than the duties for which there is a statutory entitlement to reasonable paid time off) was 1.55% (2022: 1.80%).

	Year ended 31 July 2023 Headcount	Year ended 31 July 2022 Headcount	Year ended 31 July 2023 FTE	Year ended 31 July 2022 FTE
Remuneration of higher paid staff:				
£100,000-£104,999	86	80	80.5	70.7
£105,000-£109,999	66	64	57.0	55.4
£110,000-£114,999	68	86	57.6	74.7
£115,000-£119,999	87	40	73.3	35.2
£120,000-£124,999	39	27	35.4	23.5
£125,000-£129,999	40	33	33.3	29.7
£130,000-£134,999	27	32	22.7	27.2
£135,000-£139,999	28	19	23.3	15.4
£140,000-£144,999	14	15	13.2	14.5
£145,000-£149,999	19	13	17.5	11.6
£150,000-£154,999	16	10	13.8	8.2
£155,000-£159,999	6	14	5.3	12.5
£160,000-£164,999	10	10	7.3	7.3
£165,000-£169,999	10	4	8.4	3.6
£170,000-£174,999	9	7	6.3	4.9
£175,000-£179,999	4	3	3.3	3.0
£180,000-£184,999	1	1	0.6	1.0
£185,000-£189,999	7	5	7.0	4.2
£190,000-£194,999	7	5	5.4	4.2
£195,000-£199,999	5	6	4.9	5.6
£200,000-£204,999	6	6	5.3	5.9
£205,000-£209,999	6	3	5.7	2.1
£210,000-£214,999	5	1	5.0	1.0
£215,000-£219,999	-	4	-	4.0
£220,000-£224,999	2	2	2.0	2.0
£225,000-£229,999	5	5	4.6	4.3
£230,000-£234,999	5	1	4.3	0.3
£235,000-£239,999	2	-	2.0	-
£240,000-£244,999	-	1	-	1.0
£245,000-£249,999	2	-	2.0	-
£250,000-£254,999	-	4	-	3.5
£255,000-£259,999	3	1	3.0	0.1
£260,000-£264,999	1	-	1.0	-
£270,000-£274,999	-	1	-	0.2
£285,000-£289,999	-	1	-	1.0
£290,000-£294,999	1	1	1.0	1.0
£305,000-£309,999	-	1	-	1.0
£315,000-£319,999	1	-	1.0	-
£325,000-£329,999	-	1	-	0.5
£335,000-£339,999	1	2	1.0	2.0
£340,000-£344,999	2	1	2.0	1.0
£350,000-£354,999	1	-	1.0	-
£360,000-£364,999	-	1	-	1.0
£365,000-£369,999	1	1	1.0	1.0
£375,000-£379,999	1	-	1.0	-
£380,000-£384,999	-	1	-	0.1
£385,000-£389,999	1	-	0.1	-
£425,000-£429,999	-	1	-	1.0
£430,000-£434,999	2	1	1.1	0.1
	597	515	520.2	446.5

Remuneration of higher paid staff is the full-time equivalent basic annual salary prior to any adjustment for salary sacrifice. The number of staff is calculated on a full-time equivalent basis. Staff who joined or left part-way through a year but who would have received salary in these bands in a full year are not included unless the salary that they received for the portion of the year they were employed by the College exceeded £100k, in which case they are included in the pay band corresponding to what they received. Where a proportion of the salary is reimbursed by the NHS, only the portion paid by the College is disclosed.

Notes to the financial statements

Year ended 31 July 2023

9. Interest and other finance costs

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Loan interest	13.3	13.4	13.3	13.4
Finance lease interest	4.7	4.6	4.7	4.6
Other financing costs	8.5	1.1	8.5	1.1
	26.5	19.1	26.5	19.1

Other financing costs include £8.3 million (2022: £0.9 million) related to the obligation to fund deficit on USS Pension. Further information on this can be found in Note 22.

10. Analysis of total expenditure by activity

	Consolidated				College	
	Staff Costs £m	Depreciation and amortisation £m	Other operating expenses £m	Interest and other finance costs £m	Total £m	Total £m
2023						
Academic departments	322.3	3.4	89.4	1.0	416.1	416.5
Research grants and contracts	178.0	15.3	104.5	-	297.8	298.3
Academic services	43.1	0.1	38.7	-	81.9	79.6
Bursaries and scholarships	-	-	48.4	-	48.4	48.4
Administration and central services	62.6	2.6	34.7	-	99.9	99.9
Premises	18.9	58.2	125.0	-	202.1	196.3
Residences, catering and conferences	8.5	11.5	29.4	4.6	54.0	54.0
Other expenditure	12.5	0.8	5.7	20.9	39.9	41.7
Total	645.9	91.9	475.8	26.5	1,240.1	1,234.7
2022						
Academic departments	299.3	3.5	74.0	0.6	377.4	377.5
Research grants and contracts	173.0	15.4	97.9	-	286.3	287.0
Academic services	39.5	0.1	37.9	-	77.5	75.5
Bursaries and scholarships	-	-	45.4	-	45.4	45.4
Administration and central services	57.9	2.5	29.4	-	89.8	89.8
Premises	17.3	58.0	79.2	-	154.5	147.4
Residences, catering and conferences	7.0	11.7	22.4	4.6	45.7	45.7
Other expenditure	161.6	-	7.4	13.9	182.9	185.6
Total	755.6	91.2	393.6	19.1	1,259.5	1,253.9

Other expenditure within staff costs includes a decrease in USS pension provision of £0.2 million in 2023 (2022: £152.1 million increase) as disclosed in Notes 8 and 22.

	Year ended 31 July 2023 £000	Year ended 31 July 2022 £000
Other operating expenses include:		
External auditors' remuneration in respect of audit services	524	437
External auditors' remuneration in respect of prior year audit services	31	21
External auditors' remuneration in respect of non-audit services	24	58

11. Access and participation expenditure

	Consolidated and College					
	Year ended 31 July 2023			Year ended 31 July 2022		
	Staff costs £m	Other operating expenses £m	Total £m	Staff costs £m	Other operating expenses £m	Total £m
Access investment	1.8	0.8	2.6	1.6	0.6	2.2
Financial support	0.1	9.7	9.8	0.1	9.1	9.2
Disability support	0.9	0.5	1.4	0.9	0.4	1.3
Research and evaluation	0.2	-	0.2	0.3	-	0.3
	3.0	11.0	14.0	2.9	10.1	13.0

All universities wishing to charge full fees to domestic undergraduate students have to produce Access and Participation Plans which set out how they will improve equality of opportunity for underrepresented groups to access, succeed in and progress from higher education. These must be approved by the Director for Fair Access and Participation at the OfS. The access and participation expenditure stated above includes that related to the delivery of the College's approved plans. Support for disabled students reported here includes expenditure delivered through targeted College activities and services, such as the Disability Advisory Service, which supports all students at all levels of study. Disabled students also receive support through other College services not included here as it is not possible to disaggregate these.

Staff costs above are already included in the overall staff costs figures reported in these financial statements (see Note 8).

The College's Access and Participation plan, which does not form part of the audited financial statements, is published on the College's website:

https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/admissions/20-entry/ImperialCollegeLondon_APP_2020-21_V1_10003270.pdf

Notes to the financial statements

Year ended 31 July 2023

12. Intangible Assets

Consolidated and College	Rights of access to research facilities £m	Software £m	Software in the course of construction £m	Total £m
Cost				
At 1 August 2022	40.0	43.3	-	83.3
Additions	-	0.2	4.2	4.4
At 31 July 2023	40.0	43.5	4.2	87.7
Accumulated amortisation				
At 1 August 2022	4.6	25.1	-	29.7
Charge for the year	0.8	2.5	-	3.3
At 31 July 2023	5.4	27.6	-	33.0
Net book value				
At 31 July 2023	34.6	15.9	4.2	54.7
At 31 July 2022	35.4	18.2	-	53.6

During 2022–23, the College considered the presentation of balances that could be presented as intangible assets. This review considered both IT development costs and other potential intangible assets held by the Group. As part of this review, the College has identified the following:

- IT software – the College has historically recorded its IT development costs within fixed assets on the basis of materiality. The College now records IT software as intangible assets.
- Rights of access to research facilities – the College is an academic partner of the Francis Crick Institute, through an initial investment of £40 million for which it received equity shares and classified these as investments in accordance with the legal form of the shares. It has historically been impaired annually based on the benefits expected to be obtained over the remaining period of the investment. This has been re-assessed and the College considers the substance of the asset acquired was the access right to research facilities over a period of 50 years through a joint venture agreement entered into at the point of investing in the Institute. As such, it now considers it would be more appropriate to classify this as an intangible asset.

Balances as at 31 July 2022 have been restated with £18.2 million reclassified from fixed assets and £35.4 million from non-current investments.

During the year, the College capitalised expenditure of £4.4 million relating to two internally generated assets.

13. Fixed Assets

	Freehold land and buildings £m	Leasehold land and buildings £m	Fixtures, fittings, and equipment £m	Assets in the course of construction £m	Total £m
Consolidated					
Cost					
At 1 August 2022	1,242.2	900.3	357.6	70.9	2,571.0
Additions	2.7	2.4	4.9	120.5	130.5
Transfers between classes	28.8	11.7	12.2	(52.7)	-
Disposals	(9.1)	(0.2)	(7.1)	-	(16.4)
Impairment	(2.7)	-	-	-	(2.7)
At 31 July 2023	1,261.9	914.2	367.6	138.7	2,682.4
Accumulated depreciation					
At 1 August 2022	275.0	430.0	289.1	-	994.1
Charge for the year	31.1	35.9	21.6	-	88.6
Disposals	(3.1)	(0.2)	(6.9)	-	(10.2)
At 31 July 2023	303.0	465.7	303.8	-	1,072.5
Net book value					
At 31 July 2023	958.9	448.5	63.8	138.7	1,609.9
At 31 July 2022	967.2	470.3	68.5	70.9	1,576.9
College					
Cost					
At 1 August 2022	1,241.5	884.9	357.6	70.9	2,554.9
Additions	2.7	1.6	4.9	120.5	129.7
Transfers between classes	28.8	11.7	12.2	(52.7)	-
Disposals	(9.1)	-	(7.0)	-	(16.1)
Impairment	(2.7)	-	-	-	(2.7)
At 31 July 2023	1,261.2	898.2	367.7	138.7	2,665.8
Accumulated depreciation					
At 1 August 2022	274.3	424.2	289.3	-	987.8
Charge for the year	31.1	35.3	21.6	-	88.0
Disposals	(3.1)	-	(6.9)	-	(10.0)
At 31 July 2023	302.3	459.5	304.0	-	1,065.8
Net book value					
At 31 July 2023	958.9	438.7	63.7	138.7	1,600.0
At 31 July 2022	967.2	460.7	68.3	70.9	1,567.1

At 31 July 2023, freehold land and buildings included £201.7 million (2022: £199.2 million) in respect of freehold land which is not depreciated.

Notes to the financial statements

Year ended 31 July 2023

13. Fixed Assets (continued)

Consolidated and College assets include assets held under finance leases as follows:

	Leasehold land and buildings		Fixtures, fittings, and equipment (incl. assets in the course of construction)	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Cost	95.3	95.6	2.3	-
Accumulated depreciation	(22.2)	(20.4)	-	-
Charge for year	(2.1)	(2.1)	-	-
Net book value	71.0	73.1	2.3	-

Griffon Studios, the 566 postgraduate student apartment block, is held under a 45 year finance lease following its sale to and leaseback from Legal and General Pensions Ltd at a net book value of £69.5 million (2022: £71.6 million).

Included at cost within land and buildings for the College and Group as at 31 July 2023 is a heritage asset, being the nineteenth-century built Queen's Tower. It has a carrying value of £2.0 million (2022: £0.1 million) and is currently insured at a value of £16.2 million (2022: £16.2 million). The College owns other works of art, with negligible cost when acquired and insured at a value of £0.5 million, which are not included above.

The College has an aim to reach carbon net-zero by 2040 as part of its Sustainability Strategy to make the estate more sustainable. The College conducted an impairment review including consideration of climate-related matters and identified no indicators of either impairment or a need to change asset useful economic lives relating to climate change. This will be kept under review as the College further develops its plans to reach net-zero.

14. Non-current investments

	Marketable investments	Investment property	Non-listed investments	Subsidiary companies	Total
	£m	£m	£m	£m	£m
Consolidated					
At 1 August 2022	427.3	261.9	44.7	-	733.9
Additions	21.2	0.6	2.9	-	24.7
Disposals	(15.3)	(2.5)	(4.3)	-	(22.1)
Gain/(loss) on market movements	14.5	(7.0)	0.2	-	7.7
At 31 July 2023	447.7	253.0	43.5	-	744.2
College					
At 1 August 2022	427.3	261.9	52.2	35.1	776.5
Additions	21.2	0.6	2.9	86.7	111.4
Disposals	(15.3)	(82.0)	(4.3)	(4.7)	(106.3)
Gain on market movements	14.5	7.5	0.2	-	22.2
Impairment	-	-	-	(9.5)	(9.5)
At 31 July 2023	447.7	188.0	51.0	107.6	794.3

Marketable investments as at 31 July 2023 comprise £416.8 million listed equity (2022: 398.0 million), £22.1 million cash and bonds (2022: £18.3 million), and £8.8 million of listed alternative investments (2022: £11.0 million). Cash and bonds comprise cash held by external fund managers to cover distributions and to take advantage of new investment opportunities, and bonds.

Non-listed investments as at 31 July 2023 comprise £2.9 million unlisted equity (2022: £3.2 million) and £40.7 million in private loans (2022: £41.6 million), including £35.0 million (2022: £36.8 million) due from Scale Space LLP (see Note 15).

Impairment indicators were identified for one subsidiary, One Portal Way Limited, as a result of a significant fall in the fair value of the investment property it holds. An impairment provision of £12.6 million has been recognised in respect of this against the College's investment in subsidiary companies. The value of impairment has been derived from the fall in the fair value of the investment, as the administration of this property is the company's only line of business. The impairment expense has been recognised in other operating expenses in the College's Statement of comprehensive income and expenditure. This has been offset by a partial reversal of a prior year impairment of £3.1 million related to another subsidiary, Imperial College Innovations Limited, which was due to an increase in the fair value of the assets held by that company.

15. Investments in joint ventures

Imperial College Thinkspace Limited has made no further investment this year in Scale Space LLP (2022: £1.2 million), a joint venture partnership with Accelerate Property Feeder Ltd (a subsidiary of Blenheim Chalcot LTF Limited), with no future capital commitments. The joint venture has completed construction on the business innovation space at our White City Campus. Total investment in the joint venture is £8.7 million (2022: £8.7million). Imperial College Thinkspace Limited received £1.7million dividends from the joint venture this year (2022: £Nil). At 31 July 2023 the College has a loan of £31.9 million outstanding with the joint venture (2022: £33.7 million) and a further £3.1 million of outstanding interest capitalised on this loan (2022: £3.1 million). Scale Space LLP is accounted for on the equity basis with the College's share of net assets of £6.3 million as at 31 July 2023 (2022: £7.3 million) and a share of profits relating to ongoing operations of £0.7 million (2022: loss of £0.1 million).

16. Subsidiary undertakings

As at 31 July the subsidiary companies, all of which are registered in England and are wholly-owned by the College, were as follows:

Company	Principal Activity	Holding %
Burlington Danes Construction Ltd	Construction and property services	100
I C Consultants Ltd	Consultancy and scientific services	100
Imperial Activities Ltd	Commercial property services	100
Imperial College Developments Ltd	Development of building projects	100
Imperial College Innovations Ltd	Commercialisation and startup support	100
Imperial College Projects Ltd	Provision of scientific services	100
Imperial College ThinkSpace Ltd	Provision of facilities to spinout companies	100
One Portal Way Ltd	Development of building projects	100
Wye Foundation Trust	Charitable Trust	100

All of the subsidiary companies noted above have their registered address at the Faculty Building, Imperial College London, London, SW7 2AZ. During the year two subsidiary companies, Imperial College London Ltd and Imperial MBA Ltd, were closed and removed from the Companies House Register.

Notes to the financial statements

Year ended 31 July 2023

17. Trade and other receivables

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Research grants and contracts - receivables	26.4	20.2	26.4	20.2
Research grants and contracts - work in progress	88.7	83.0	88.7	83.0
Other trade receivables	132.9	112.0	127.6	107.2
Prepayments, accrued income and other receivables	159.7	130.8	154.8	126.1
Amounts due from subsidiary companies	-	-	12.5	12.9
	407.7	346.0	410.0	349.4
Amounts due after more than one year included above	70.5	63.9	70.8	65.4

Included within Other trade receivables are invoices totalling £110.9 million (2022: £93.2 million) in respect of tuition fees for courses starting in the next financial year with the income deferred on the balance sheet until the start of the course.

18. Current investments

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Deposits	49.2	49.7	49.2	49.7

Deposits included here are those held with banks and building societies with more than three months' maturity at the balance sheet date.

At 31 July 2023 the weighted average interest rate of these fixed rate deposits was 4.2% per annum. The fair value of these deposits was not materially different from their book value.

19. Creditors : amounts falling due within one year

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Unsecured loans	6.4	10.2	6.4	10.2
Obligations under finance leases	1.4	1.0	1.4	1.0
Deferred lease premiums	0.3	0.3	0.3	0.3
Research payments received on account	285.8	278.3	285.8	278.3
Trade payables	26.0	25.7	24.7	23.6
Social security and other taxation payable	18.7	1.2	18.5	2.5
Accruals, deferred income and other creditors	363.9	317.2	345.6	302.2
Amounts due to subsidiary companies	-	-	2.3	3.2
	702.5	633.9	685.0	621.3

Deferred income

Included within accruals, deferred income and other creditors are the following items of income which have been deferred.

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Income with performance related conditions	29.2	29.8	29.2	29.8
Tuition fee income in respect of courses starting in the next financial year	175.1	156.9	175.1	156.9
Other income	37.3	35.0	30.2	29.7
	241.6	221.7	234.5	216.4

Notes to the financial statements

Year ended 31 July 2023

20. Creditors : amounts falling due after more than one year

	Consolidated		College	
	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m	£m	£m
Obligations under finance lease	86.4	85.8	86.4	85.8
Deferred lease premiums	10.1	10.4	10.1	10.4
Unsecured loans	408.2	414.6	408.2	414.6
	504.7	510.8	504.7	510.8

The maturity profile of the carrying amount of the Group's and College's liabilities at 31 July was as follows:

	Lease premiums £m	Bank loans £m	Finance leases £m	2023 £m	2022 £m
Due within one year or on demand (Note 19)	0.3	6.4	1.4	8.1	11.5
In more than one year but no more than two years	0.3	6.4	1.5	8.2	7.7
In more than two years but no more than five years	1.0	19.1	4.6	24.7	23.4
In more than five years	8.8	382.7	80.3	471.8	479.7
Total unsecured loans and finance lease obligations	10.4	414.6	87.8	512.8	522.3
Less than one year	(0.3)	(6.4)	(1.4)	(8.1)	(11.5)
Due after more than one year	10.1	408.2	86.4	504.7	510.8

The bank loans comprise the following unsecured sterling borrowing facilities:

	Outstanding amount drawn £m	Original amount £m	Interest rate %	Date drawn	Term Years
Lender					
Private Placement	50.0	50.0	5.39	Mar-03	30
Private Placement	50.0	50.0	4.84	Jul-06	50
EIB	54.1	70.0	2.87	Dec-14	25
EIB	60.5	70.0	2.50	Nov-16	25
Private Placement	30.0	30.0	2.47	Jan-17	33
Private Placement	71.0	71.0	2.47	Jan-17	35
Private Placement	99.0	99.0	2.44	Jan-17	40
	414.6	440.0			

The unsecured sterling borrowing facilities are subject to financial covenants which monitor the College's ability to service debt from operating cash flows and income, as well as the College's level of indebtedness in comparison to the assets it holds. Such covenants are tested annually and were met at 31 July 2023.

21. Reconciliation of net debt

	Consolidated			
	1 August 2022	Cash flows	Other changes	31 July 2023
	£m	£m	£m	£m
Cash in hand	367.8	(18.7)	(1.0)	348.1
Current investments	49.7	(0.5)	-	49.2
Debt due within one year	(10.2)	10.2	(6.4)	(6.4)
Debt due after more than one year	(414.6)	-	6.4	(408.2)
Finance leases due within one year	(1.0)	1.2	(1.6)	(1.4)
Finance leases due after more than one year	(85.8)	-	(0.6)	(86.4)
Net debt	(94.1)	(7.8)	(3.2)	(105.1)

Other changes comprise foreign exchange gains/(losses) on cash in hand and non-cash movements.

22. Provisions for liabilities

	Obligation to fund deficit on USS Pension	Corporate	Decommissioning of Engineering facility	Total other
	£m	£m	£m	£m
Consolidated and College				
At 1 August 2022	254.9	0.5	0.2	0.7
Utilised in the year	(16.6)	(0.1)	(0.2)	(0.3)
Movement in the year	8.1	0.4	-	0.4
Unused amounts reversed in the year	-	(0.1)	-	(0.1)
At 31 July 2023	246.4	0.7	-	0.7

USS deficit

The obligation to fund the past deficit on the USS pension scheme arises from the contractual obligation with the pension scheme for total payments relating to benefits arising from past performance. A new deficit recovery plan was put in place as part of the 2020 valuation, which extended the period of contribution by 10 years from 31 March 2028 to 31 March 2038. The plan requires payment of 6.2% of salaries over the period 1 April 2022 to 31 March 2024 and 6.3% over the period 1 April 2024 to 31 March 2038. There has been a net £0.2 million decrease in the value of the deficit recovery provision from last year, which is driven by an increase of 2.21% in the discount rate and increases in salary inflation (Note 8). Also included within the movement in the year is the finance charge of £8.3 million relating to the unwind of the provision (Note 9). This is a non-cash cost charged to quantify the time value of money and ensure that the future deficit contributions the College will pay are measured at today's prices.

In its 2022-23 annual report, the USS scheme reported a surplus of £7 billion based on its monitoring of the 2020 valuation. The 2023 revaluation of the USS pension scheme is currently in progress, but if the surplus is confirmed the deficit contribution plan may be removed, which would mean the provision would no longer be required. The College will continue to account for the full liability of future deficit contributions until such a change is announced as it has a legal obligation to continue making deficit contributions until informed otherwise.

Notes to the financial statements

Year ended 31 July 2023

22. Provisions for liabilities (continued)

The major assumptions used to calculate the obligation are:

	<u>2023</u>	<u>2022</u>
Discount rate	5.52%	3.31%
Salary growth	4.5%–7.25%	3.0%–4.0%
USS membership growth	Nil	Nil

The methodology for the USS membership growth assumption looks at both historic College USS membership trends and expected future growth of USS eligible staff. Membership has been stable this year and the College has decided to maintain a year-on-year growth of 0% for the duration of the deficit recovery period.

As set out in the accounting policies, there are some critical judgements made in estimating the obligation to fund the USS deficit. The sensitivity of the principal assumptions used to measure the USS deficit provision are set out below:

<u>Change in assumptions at 31 July 2023</u>	<u>Estimated impact</u>
0.5% pa decrease (increase) in discount rate	+£9.1m (-£8.7m)
1% pa increase (decrease) in salary inflation in each of the next 5 years of the deficit recovery plan	+£10.2m (-£9.8m)
1% pa increase (decrease) in the long-term salary inflation rate	+£10.1m (-£9.5m)
1% increase in scheme membership each of the next 5 years of the deficit recovery plan	+£10.4m
1 year decrease in deficit recovery period	-£15.6m

Other

The Corporate provision relates to a number of restructuring programmes which are currently underway within the College. It also includes £0.4 million (2022: £0.4 million) set aside for remedial cladding works related to one of our student halls.

23. Endowment reserves

Consolidated and College restricted net assets relating to endowments are as follows:

					2023	2022
	Restricted permanent endowments	Unrestricted permanent endowments	Total permanent endowments	Expendable endowments	Total endowments	Total endowments
	£m	£m	£m	£m	£m	£m
Balances at 1 August						
Capital	143.0	15.2	158.2	97.1	255.3	234.5
Accumulated income/(expenditure)	(6.3)	-	(6.3)	(29.4)	(35.7)	(32.4)
	136.7	15.2	151.9	67.7	219.6	202.1
New endowments	1.5	-	1.5	2.1	3.6	27.3
Reclassification - capital	0.3	-	0.3	(0.3)	-	-
Investment income	2.1	0.3	2.4	1.3	3.7	2.4
Expenditure	(2.6)	(0.1)	(2.7)	(3.6)	(6.3)	(5.7)
	(0.5)	0.2	(0.3)	(2.3)	(2.6)	(3.3)
Realised gain on sale of investments	-	-	-	-	-	0.5
Decrease in market value of investments	(0.3)	(0.1)	(0.4)	(0.1)	(0.5)	(7.0)
At 31 July	137.7	15.3	153.0	67.1	220.1	219.6
Represented by:						
Capital	144.5	15.1	159.6	98.8	258.4	255.3
Accumulated income/(expenditure)	(6.8)	0.2	(6.6)	(31.7)	(38.3)	(35.7)
	137.7	15.3	153.0	67.1	220.1	219.6
					2023	2022
					Total	Total
					£m	£m
Analysis by asset						
Non-current investments					145.8	166.5
Accrued income					20.5	20.1
Current liabilities					(0.2)	(0.2)
Cash & cash equivalents					54.0	33.2
					220.1	219.6

Included within endowments are a number of permanent funds with a deficit of accumulated income as at 31 July 2023. Within unrestricted permanent endowments there are 3 funds with a combined deficit balance of £0.2 million (2022: 3 funds with a deficit totalling £0.1 million). Within restricted permanent endowments there are 87 individual funds with a total combined deficit of £10.5 million (2022: 88 funds with a total combined deficit of £9.5 million).

Notes to the financial statements

Year ended 31 July 2023

24. Restricted reserves

Reserves with restrictions are as follows:

				2023	2022
	Capital £m	Research £m	Other £m	Total £m	Total £m
Consolidated					
Balances at 1 August	35.8	48.4	23.0	107.2	84.5
New Funding body grants	31.7	-	-	31.7	14.1
New income / donations	6.1	23.3	15.5	44.9	33.5
Investment income	-	0.1	-	0.1	-
Expenditure	(56.9)	(14.4)	(6.2)	(77.5)	(24.9)
	(19.1)	9.0	9.3	(0.8)	22.7
At 31 July	16.7	57.4	32.3	106.4	107.2

				2023	2022
	Capital £m	Research £m	Other £m	Total £m	Total £m
College					
Balances at 1 August	35.8	48.4	23.0	107.2	95.0
New Funding body grants	31.7	-	-	31.7	14.1
New income / donations	6.1	23.3	15.5	44.9	33.5
Investment income	-	0.1	-	0.1	-
Expenditure	(56.9)	(14.4)	(6.2)	(77.5)	(35.4)
	(19.1)	9.0	9.3	(0.8)	12.2
At 31 July	16.7	57.4	32.3	106.4	107.2

25. Capital and other commitments

Provision has not been made for the following capital commitments at 31 July:

	Consolidated		College	
	2023 £m	2022 £m	2023 £m	2022 £m
Capital commitments for major building projects contracted for at 31 July	97.0	67.1	96.3	66.8
Capital commitment for property purchase	17.9	17.9	17.9	17.9
Total capital commitments	114.9	85.0	114.2	84.7

The commitments relate to capital projects on the South Kensington (£37.3 million), White City (£52.7 million) and Hammersmith campuses (£7.0 million) and are expected to be completed over the next 24 months. Also included in the capital commitments is the amount the College has contracted to pay in respect of future purchase of property. The estimated cost is £17.9 million and is expected to be incurred in 2025-26 and 2026-27.

26. Contingent liabilities

The College is engaged in a number of matters for which the outcomes are uncertain and the likelihood of occurrence is considered remote or the potential outflows are not material to the College and Group.

27. Lease payables

Total rentals payable under operating leases:

	Consolidated		College	
	2023	2022	2023	2022
	£m	£m	£m	£m
Future minimum lease payments due:				
Not later than one year	8.4	7.4	7.5	7.2
Later than one year and not later than five years	32.4	28.6	28.6	27.7
Later than five years	121.6	120.4	115.2	118.6
Total lease payments due	162.4	156.4	151.3	153.5

Lease payments recognised as an expense in the year totalled £7.2 million (2022: £7.3 million).

28. Lease receivables

Total rentals receivable under operating leases:

	Consolidated		College	
	2023	2022	2023	2022
	£m	£m	£m	£m
Future minimum lease payments due:				
Not later than one year	15.0	13.2	5.3	9.0
Later than one year and not later than five years	30.5	33.3	6.4	23.1
Later than five years	32.7	46.3	22.5	40.2
Total lease payments due	78.2	92.8	34.2	72.3

These operating leases comprise leases on both residential and commercial properties to third parties of varying lengths.

Notes to the financial statements

Year ended 31 July 2023

29. Related party transactions

The College maintains a Register of Interests of all Council members, members of Council committees, academic and professional services staff. Policies incorporated within the College's Financial Ordinances require an individual to declare an interest and withdraw from any commercial discussions should a conflict of interest potentially arise. Written assurances have been obtained from Council members and senior officers of the College in respect of themselves and their close family that for the year to 31 July 2023 they have not unduly influenced any transaction between the College and a related party, as defined by FRS 102.

Commercial relationships with companies or other organisations that might be regarded as related parties have been reviewed. Transactions of a similar nature are aggregated unless, in the opinion of the College, separate disclosure is necessary to understand the effect of the transactions on the financial statements. The College has taken advantage of the exemption given by FRS 102, Related Party Disclosures, from disclosing transactions with its wholly owned subsidiaries. Scale Space LLP, as a joint venture between Imperial College ThinkSpace Limited and Accelerate Property Feeder Ltd, is also a related party to the College. During the year, the College group purchased goods and services amounting to £4.8 million and invoiced receivables of £4.5 million from Scale Space LLP. Of the total amount relating to purchased goods and services, £1.5 million related to the College, with the remaining amount being transactions between the College's subsidiaries and Scale Space LLP. Further details of transactions between the College and Scale Space LLP can be found in Note 15.

During the year, the College purchased goods and services amounting to £8.4 million (2022: £4.1 million) and invoiced receivables amounting to £37.1 million from related parties (2022: £41.2 million). At the year end £2.4 million was outstanding and included in debtors (2022: £0.1 million). Purchases of £2.4 million (2022: £3.5 million) and invoiced receivables of £1.2 million (2022: £2.1 million) relate to the transactions with companies in which the key management personnel (see Note 8) declared interest.

Invoiced receivables include £6.0 million from Cancer Research UK where Professor Sir Leszek Borysiewicz, external member of the Council, is Chairman and Trustee. Cancer Research UK has detailed guidelines and controls, contained within its Articles of Association, which require that Trustees must withdraw from any discussion or decision making regarding any matter where there may be a conflict of interest. Purchases of goods and services include £0.02 million and invoiced receivables include £19.4 million from Wellcome Trust where Lisha Patel, an external member of the Endowment Board, is Managing Director of Investments. The investment policy of Wellcome Trust is set by a sub-committee of the Board of Governors, the Investment Committee, which also supports and oversees their investment work. Lisha Patel is not a member of the Investment Committee and therefore is not involved in their decision making process.

No Council member, who are trustees for the purpose of charity law, has received any remuneration or waived payments from the College during the year in respect of their services as a trustee (2022: Nil).

The total expenses paid to or on behalf of five trustees were £3,309 (2022: £4,340 to five trustees). This represents travel and subsistence expenses incurred in attending Council, Committee meetings and charity events in their official capacity.

30. Connected charitable Institutions

A number of charitable institutions are administered by, or on behalf of, the College and have been established for its general or special purposes. As a result, under paragraph 28 of Schedule 3 to the Charities Act 2011, these connected institutions are exempt from registration with the Charity Commission. The College has no connected charities with income of £100,000 and above to disclose. Aggregate figures for connected charities with income below this threshold are disclosed below.

	Opening reserves	Income and donations received	Expenditure & outgoing resources	Capital growth/ diminution	Closing reserves
	£000	£000	£000	£000	£000
Funds where individual income for the year was under £100,000					
Consolidated					
Prize Funds (two funds)	425	-	(8)	6	423
Research support (two funds)	2,701	-	(59)	35	2,677
Student support (one fund)	3,485	5	(27)	43	3,506
	6,611	5	(94)	84	6,606

31. Pension Schemes

The College participates in four separate, independently managed, defined benefit occupational pension schemes, which were contracted out of the State Second Pension (S2P) until 31 March 2016. Each is valued triennially by professionally qualified and independent actuaries, except the NHS Scheme which is valued quadrennially. The Universities Superannuation Scheme (USS), the Superannuation Arrangements of the University of London (SAUL) and NHS pension schemes are multi-employer schemes and it is not possible to identify the College's share of the underlying assets and liabilities of the schemes on a consistent and reasonable basis. Hence, as required by Section 28 of FRS 102, contributions to the schemes are accounted for as if they were defined contribution schemes. This means the amounts charged to the statement of comprehensive income and expenditure represent the contributions payable to the schemes in respect of the accounting period. For both USS and SAUL, in the event of the insolvency of any of the participating employers, the amount of any pension funding shortfall (which cannot otherwise be recovered) in respect of that employer may be spread across the remaining participant employers and reflected in the next actuarial valuation. The College also participates in the Federated Pension Scheme (FPS).

USS

Staff paid on academic and academic-related scales (who are otherwise eligible), can acquire pension rights through USS, which is a national scheme administered centrally for UK universities. With effect from 1 October 2016, the scheme changed from a defined benefit only pension scheme to a hybrid pension scheme, providing defined benefits (for all members) as well as defined contribution benefits, above a threshold amount of salary. The assets of the scheme are held in a separate fund administered by the Trustee.

The total cost for the College for the year ended 31 July 2023 was £57.9 million (2022: £53.7 million). Since the institution cannot identify its share of scheme assets and liabilities, the following disclosures reflect those relevant for the scheme as a whole. The latest available complete actuarial valuation of the Retirement Income Builder section of the Scheme is at 31 March 2020 ("the valuation date"), which was carried out using the projected unit method. At the valuation date, the value of the assets of the scheme was £66.5 billion and the value of the scheme's technical provisions was £80.6 billion, indicating a shortfall of £14.1 billion. The assets were therefore sufficient to cover 83% of the benefits which had accrued to members, after allowing for expected future increases in earnings. As at 31 March 2023 the funding level has increased from 96% to 103% under FRS 102 due to the substantial fall in the scheme's liabilities since the last monitoring report combined with a comparatively smaller fall in the scheme's assets. The employer contribution during the year was 21.6%. The next valuation of the scheme is in progress and further information on this can be found in Note 22.

The overall position of the scheme, calculated on a basis consistent with the requirements of FRS 102, is presented below. The defined benefit liability numbers for the scheme have been produced using the following assumptions:

	31 March 2023	31 March 2022
Life expectancy:		
Males (females) currently aged 65 (years)	24.0 (25.6)	23.9 (25.5)
Males (females) currently aged 45 (years)	26.0 (27.6)	25.9 (27.3)
Existing scheme's benefits:		
Scheme assets	£73.1bn	£88.9bn
FRS 102 liabilities	£71.1bn	£92.9bn
FRS 102 surplus	£2.0bn	£4.0bn
FRS 102 funding level	103%	96%

Note that the FRS 102 funding level is based on accounting rules. This is not the driver for the benefit and contribution decisions for the scheme.

Notes to the financial statements

Year ended 31 July 2023

31. Pension Schemes (continued)

SAUL

The College participates in SAUL, which is an independently-managed pension scheme for the non-academic staff of over 50 colleges and institutions with links to higher education. Pension benefits accrued within SAUL currently build up on a Career Average Revalued Earnings (“CARE”) basis. The last actuarial valuation was carried out with an effective date of 31 March 2020. Informal reviews of SAUL’s position, reflecting changes in market conditions, cash flow information and new accrual of benefits, are carried out between formal valuations. The next actuarial valuation will assess SAUL’s funding position at 31 March 2023.

The funding principles were agreed by the Trustee and employers in June 2021 and will be reviewed at SAUL’s next formal valuation in 2023. At the 31 March 2020 valuation SAUL was 94% funded on its Technical Provisions basis. However, positive market movements were experienced following the valuation date and the Trustee and the Employers agreed to allow for post valuation experience up to 30 April 2021. As SAUL was in surplus on its Technical Provisions basis at that time, no deficit contributions were required. However, the Trustee and the employers agreed that the ongoing employer’s contributions should increase to address the contribution strain between the money members and employers pay into SAUL and the cost of providing future pensions. The employer contribution rate increased to 21% of CARE Salaries from 1 January 2023.

NHS

Staff who have pension rights in the NHS Pension Scheme, on taking up a post within the College, may remain in membership of that scheme which is the nationally administered scheme for the NHS. The NHS Pension Scheme is an unfunded defined benefit scheme that covers NHS employers, General Practices and other bodies, allowed under the direction of the Secretary of State in England and Wales.

The Scheme is subject to a full valuation every four years. A valuation of the scheme liability is carried out annually by the scheme actuary (currently the Government Actuary’s Department) as at the end of the reporting period. Actuarial assessments are undertaken in intervening years between formal valuations using updated membership and financial data and are accepted as providing suitably robust figures for financial reporting purposes. The Scheme Regulations allow contribution rates to be set by the Secretary of State for Health, with consent of HM Treasury, and consideration of the advice of the Scheme Actuary and appropriate employee and employer representatives as deemed appropriate.

The latest actuarial valuation undertaken for the NHS Pension Scheme was completed as at 31 March 2016. The results of this valuation set the employer contribution rate payable from April 2019 to 20.6% of pensionable pay. The actuarial valuation as at 31 March 2020 is currently underway and will set the new employer contribution rate due to be implemented from April 2024.

Federated Pension Scheme (FPS)

FPS is the scheme of St Mary’s Hospital Medical School, operated for non-academic staff prior to 1 August 1988 when it was closed to new entrants. Two thirds of the membership elected to transfer into SAUL at that time and there are now no contributing members.

The present value of the defined benefit obligation as at 31 July 2023 was measured using the projected unit credit method. The liabilities set out in this note have been calculated based on the results of the Full Scheme Funding Assessment as at 31 March 2022, updated to 31 July 2023, allowing for benefits paid. Imperial College London agreed a funding plan with the trustee body following the 31 March 2022 funding assessment, whereby contributions at the rate of £0.1 million per year would commence from 1 August 2024 to ensure the scheme remains fully funded in the future. The disclosures set out below are based on calculations carried out as at 31 July 2023 by an independent qualified actuary.

The results of the calculations and the assumptions adopted are shown below:

	2023	2022
	£m	£m
Changes in the present value of the defined benefit obligation		
Opening defined benefit obligation	(4.5)	(5.2)
Interest cost on obligation	(0.1)	(0.1)
Administration costs	(0.1)	(0.1)
Remeasurement gains and (losses) - Actuarial gains and (losses)	0.2	0.5
Benefits paid including expenses	0.4	0.4
Closing defined benefit obligation	(4.1)	(4.5)

	2023	2022
	£m	£m
Changes in the fair value of scheme assets		
Opening fair value of assets	6.0	6.8
Interest income	0.2	0.1
Remeasurement gains and (losses) – Return on scheme assets excluding interest income	(0.7)	(0.5)
Benefits paid including expenses	(0.4)	(0.4)
Closing fair value of scheme assets	5.1	6.0

	2023	2022
	£m	£m
Total expense recognised in income & expenditure		
Administration expenses	0.1	0.1

	2023	2022
Major categories of scheme assets as a percentage of total scheme assets		
Gilts	74.6%	71.9%
Corporate bonds	18.0%	19.9%
Insured annuity contracts	5.0%	5.8%
Cash	2.4%	2.4%
Total	100.0%	100.0%

The pension scheme has not invested in any of Imperial College London's own financial instruments, nor in properties or other assets used by Imperial College London. The assets are all quoted in an active market with the exception of the insured annuity contracts.

	2023	2022
	£m	£m
Reconciliation of the present value of scheme liabilities and fair value of assets to the asset recognised in the balance sheet		
Fair value of assets	5.1	6.0
Value of liabilities	(4.1)	(4.5)
Funded status	1.0	1.5
Unrecognised pension asset	1.0	1.5

Notes to the financial statements

Year ended 31 July 2023

31. Pension Schemes (continued)

Total amounts recognised in other comprehensive income		2023	2022
		£m	£m
Actual return on scheme assets – gains and (losses)		(0.5)	(0.4)
less: amounts included in net interest on the net defined benefit liability		(0.2)	(0.1)
Remeasurement gains and (losses) – Return on scheme assets excluding interest income		(0.7)	(0.5)
Remeasurement gains and (losses) - Actuarial gains and (losses)		0.2	0.5
Surplus restriction		0.5	-
Other comprehensive income gains/(losses)		-	-

Assumptions		2023	2022
Discount rate		5.1%	3.2%
Aggregate long-term expected rate of return on assets (net of expenses)		5.1%	3.2%
Retail Prices Index (RPI) Inflation		3.5%	3.4%
Consumer Prices Index (CPI) Inflation		2.9%	2.7%
Future statutory revaluation of pensions in deferment		3.0%	2.7%
Pensions in payment, increasing by CPI capped at 5% p.a.		2.9%	2.7%
Post retirement mortality assumption		S3PxA	S3PxA

Scheme contributions

The pension costs for the College and its subsidiaries under FRS 102 were:	Note	2023	2022
		£m	£m
Contributions to USS		57.9	53.7
Contributions to SAUL		26.2	19.7
Contributions to NHS		6.4	5.0
Total contributions payable		90.5	78.4
Contributions towards USS deficit	22	(16.6)	(6.0)
Total contributions recognised in staff costs		73.9	72.4

32. Financial instruments

The Group holds the following financial instruments at fair value:

Financial assets measured at fair value through income and expenditure	Note	2023 £m	2022 £m
Marketable non-current investments	14	447.7	427.3
		447.7	427.3

33. Events after the reporting period

There were no material post balance sheet events identified at the reporting date.

34. Financial Responsibility US Supplemental Schedule

In satisfaction of its obligations to facilitate students' access to US federal financial aid, the College is required, by the US Department of Education, to present the following Supplemental Schedule in a prescribed format.

The amounts presented within the schedule have been:

- prepared under the historical cost convention, subject to the revaluation of certain fixed assets;
- prepared using United Kingdom generally accepted accounting practice, in accordance with Financial Reporting Standard 102 (FRS 102) and the Statement of Recommended Practice: Accounting for Further and Higher Education (2019 edition);
- presented in pounds sterling.

The schedule sets out how each amount disclosed has been extracted from the Group financial statements. As set out above, the accounting policies used in determining the amounts disclosed are not intended to and do not comply with the requirements of accounting principles generally accepted in the United States of America.

Notes to the financial statements

Year ended 31 July 2023

34. Financial Responsibility US Supplemental Schedule (continued)

Primary Reserve Ratio

Statement / Note	Line item / related disclosure		Year ended	Year ended	Year ended	Year ended
			31 July 2023	31 July 2023	31 July 2022	31 July 2022
			£m	£m	£m	£m
Expendable Net Assets						
SOPF	Statement of financial position – Unrestricted income and expenditure reserve	Net assets without donor restrictions		1,439.5		1,408.3
SOPF	Statement of financial position – Endowment income and expenditure reserve plus Restricted income and expenditure reserve	Net assets with donor restrictions		326.5		326.8
15, 29	Notes to the financial statements – Note 15: Investments in joint venture (amount disclosed as loan to the joint venture) plus Note 29: Related party transactions (amount disclosed as outstanding at year-end within debtors)	Secured and Unsecured related party receivable	37.4		36.8	
15, 29	Notes to the financial statements – Note 15: Investments in joint venture (amount disclosed as loan to the joint venture) plus Note 29: Related party transactions (amount disclosed as outstanding at year-end within debtors)	Unsecured related party receivable		37.4		36.8
13	Notes to the financial statements – Note 13: Fixed assets (Consolidated total net book value) less Note 13: Fixed assets (Net book value of Consolidated and College leasehold land and buildings include assets held under finance leases)	Property, plant and equipment, net (includes Construction in progress)	1,536.6		1,503.8	
n/a	Schedule analysing property, plant and equipment and long-term debt for long term purposes (see below)	Property, plant and equipment - pre-implementation		980.3		1,040.8
n/a	Schedule analysing property, plant and equipment and long-term debt for long term purposes (see below)	Property, plant and equipment - post-implementation with outstanding debt for original purchase		-		-
n/a	Schedule analysing property, plant and equipment and long-term debt for long term purposes (see below)	Property, plant and equipment - post-implementation without outstanding debt for original purchase		419.4		392.1

			Year ended 31 July 2023	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2022
Statement / Note	Line item / related disclosure		£m	£m	£m	£m
		Expendable Net Assets				
13	Notes to the financial statements – Note 13: Fixed assets (Consolidated asset under construction net book value) excluding assets held under finance leases	Construction in progress		136.9		70.9
13	Notes to the financial statements – Note 13: Fixed assets (Net book value of Consolidated and College assets held under finance leases)	Lease right-of-use asset, net	73.3		73.1	
n/a	Schedule analysing lease right-of-use asset and lease right-of-use asset liability (see below)	Lease right-of-use asset pre-implementation		71.0		73.1
n/a	Schedule analysing lease right-of-use asset and lease right-of-use asset liability (see below)	Lease right-of-use asset post-implementation		2.3		-
12	Notes to the financial statements – Note 12: Intangible assets	Intangible assets		54.7		53.6
22	Notes to the financial statements – Note 22: Provisions for liabilities (Obligation to fund deficit on USS pension)	Post-employment and pension liabilities		246.4		254.9
19, 20	Notes to the financial statements – Note 19: Creditors : amounts falling due within one year (Unsecured loans) plus Note 20: Creditors : amounts falling due after more than one year (Unsecured loans)	Long-term debt - for long term purposes	414.6		424.8	
n/a	Schedule analysing property, plant and equipment and long-term debt for long term purposes (see below)	Long-term debt - for long term purposes pre-implementation		414.6		424.8
n/a	Schedule analysing property, plant and equipment and long-term debt for long term purposes (see below)	Long-term debt - for long term purposes post-implementation		-		-
n/a	n/a	Line of Credit for Construction in process		-		-
19, 20	Notes to the financial statements – Note 19: Creditors : amounts falling due within one year (Obligations under finance leases) plus Note 20: Creditors : amounts falling due after more than one year (Obligations under finance lease)	Lease right-of-use asset liability	87.8		86.8	

Notes to the financial statements

Year ended 31 July 2023

34. Financial Responsibility US Supplemental Schedule (continued)

Statement / Note	Line item / related disclosure		Year ended	Year ended	Year ended	Year ended
			31 July 2023	31 July 2023	31 July 2022	31 July 2022
			£m	£m	£m	£m
Expendable Net Assets						
n/a	Schedule analysing lease right-of-use asset and lease right-of-use asset liability (see below)	Pre-implementation right-of-use leases		85.7		86.8
n/a	Schedule analysing lease right-of-use asset and lease right-of-use asset liability (see below)	Post-implementation right-of-use leases		2.1		-
n/a	n/a	Annuities with donor restrictions		-		-
n/a	n/a	Term endowments with donor restrictions		-		-
n/a	n/a	Life income funds with donor restrictions		-		-
23	Notes to the financial statements – Note 23: Endowment reserves (Total permanent endowments)	Net assets with donor restrictions: restricted in perpetuity		153.0		151.9
Total Expenses and Losses						
SOCIE 23, 24	Statement of comprehensive income and expenditure: Total expenditure less gain on pension provision, less Notes to the financial statements – Note 23: Endowment reserves (Expenditure) less Note 24: Restricted reserves (Expenditure)	Total expenses without donor restrictions - taken directly from Statement of Activities		1,156.3		1,228.9
SOCIE	2022-23: Statement of comprehensive income and expenditure: Loss on disposal of fixed assets. 2021-22: Statement of comprehensive income and expenditure: Investment income plus Gain on disposal of non-current investments plus Loss on disposal of fixed assets plus Share of operating deficit in joint ventures plus Share of operating deficit in associates plus (Loss)/gain on investments	Non-Operating and Net Investment (loss)		6.1		20.2
SOCIE	2022-23: n/a - net investment gain. 2021-22: Statement of comprehensive income and expenditure: Investment income plus Gain on disposal of non-current investments plus (Loss)/gain on investments	Net investment losses		-		8.7
n/a	n/a	Pension-related changes other than net periodic costs		-		-

Equity Ratio

Statement / Note	Line item / related disclosure		Year ended 31 July 2023	Year ended 31 July 2023	Year ended 31 July 2022	Year ended 31 July 2022
			£m	£m	£m	£m
Modified Net Assets						
SOFP	Statement of financial position – Unrestricted income and expenditure reserve	Net assets without donor restrictions		1,439.5		1,408.3
SOFP	Statement of financial position – Endowment income and expenditure reserve plus Restricted income and expenditure reserve	Net assets with donor restrictions		326.5		326.8
12	Notes to the financial statements – Note 12: Intangible assets	Intangible assets		54.7		53.6
15, 29	Notes to the financial statements – Note 15: Investments in joint venture (amount disclosed as loan to the joint venture) plus Note 29: Related party transactions (amount disclosed as outstanding at year-end within debtors)	Secured and Unsecured related party receivable	37.4		36.8	
15, 29	Notes to the financial statements – Note 15: Investments in joint venture (amount disclosed as loan to the joint venture) plus Note 29: Related party transactions (amount disclosed as outstanding at year-end within debtors)	Unsecured related party receivable		37.4		36.8
Modified Assets						
SOFP	Statement of financial position: Total of Non-current assets plus Total of Current assets	Total Assets		3,220.3		3,135.4
n/a	Schedule analysing lease right-of-use asset and lease right-of-use asset liability (see below)	Lease right-of-use asset pre-implementation		71.0		73.1
n/a	Schedule analysing lease right-of-use asset and lease right-of-use asset liability (see below)	Pre-implementation right-of-use leases		85.7		86.8
12	Notes to the financial statements – Note 12: Intangible assets	Intangible assets		54.7		53.6

Notes to the financial statements

Year ended 31 July 2023

34. Financial Responsibility US Supplemental Schedule (continued)

Equity Ratio

Statement / Note	Line item / related disclosure		Year ended	Year ended	Year ended	Year ended
			31 July 2023	31 July 2023	31 July 2022	31 July 2022
			£m	£m	£m	£m
Modified Net Assets						
15, 29	Notes to the financial statements – Note 15: Investments in joint venture (amount disclosed as loan to the joint venture) plus Note 29: Related party transactions (amount disclosed as outstanding at year-end within debtors)	Secured and Unsecured related party receivable	37.4		36.8	
15, 29	Notes to the financial statements – Note 15: Investments in joint venture (amount disclosed as loan to the joint venture) plus Note 29: Related party transactions (amount disclosed as outstanding at year-end within debtors)	Unsecured related party receivable		37.4		36.8

Net Income Ratio

Statement / Note	Line item / related disclosure		Year ended	Year ended	Year ended	Year ended
			31 July 2023	31 July 2023	31 July 2022	31 July 2022
			£m	£m	£m	£m
SOCIE	Statement of comprehensive income and expenditure: Unrestricted comprehensive income/(expenditure) for the year	Change in Net Assets Without Donor Restrictions		31.2		(163.8)
SOCIE 23, 24	Statement of comprehensive income and expenditure: Total income plus (Loss)/gain on disposal of non-current investments plus Gain/(loss) on investments plus Share of operating surplus/(deficit) in joint ventures less Notes to the financial statements – Note 23: Endowment reserves (New endowments) less Note 23: Endowment reserves (Investment income) less Note 24: Restricted reserves (New Funding Council grants) less Note 24: Restricted reserves (New income / donations)	Total Revenue and Gains		1,193.6		1,078.8

The implementation date for determining pre-/post-implementation amounts is 31 July 2019.

	Year ended 31 July 2023	Year ended 31 July 2022
	£m	£m
Schedule analysing property, plant and equipment and long-term debt for long term purposes		
Property, plant and equipment – pre-implementation	980.3	1,040.8
Property, plant and equipment – post-implementation with outstanding debt for original purchase	-	-
Property, plant and equipment – post implementation without outstanding debt for original purchase	419.4	392.1
Construction in process	136.9	70.9
Property, plant and equipment, net (includes Construction in progress)	1,536.6	1,503.8
Long-term debt for long term purposes - pre-implementation	414.6	424.8
Long-term debt for long term purposes - post-implementation	-	-
Long-term debt – for long term purposes	414.6	424.8
Schedule analysing lease right-of-use assets and lease right-of-use assets liability		
Lease right-of-use assets pre-implementation	71.0	73.1
Lease right-of-use assets post-implemetation	2.3	-
Lease right-of-use asset, net	73.3	73.1
Lease right-of-use assets liability pre-implementation	85.7	86.8
Lease right-of-use assets liability post-implementation	2.1	-
Lease right-of-use asset liability, net	87.8	86.8

