

# **Building collaboration**

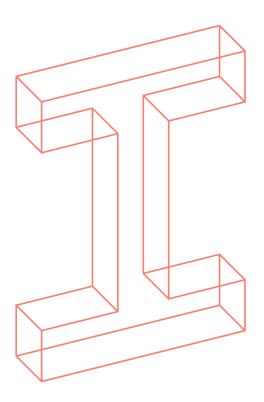
BioJapan 2025

# **About Imperial**

We are Imperial – a world-leading university for science, technology, engineering, medicine and business (STEMB), where scientific imagination leads to world-changing impact.

**Second in the world**, we use science to try to understand more of the universe and improve the lives of more people in it. Across our **nine campuses** and throughout our Imperial Global network, our **23,000 students, 8,000 staff**, and partners work together on scientific discovery, innovation and entrepreneurship. Their work navigates some of the world's toughest challenges in global health, climate change, AI, business leadership and more.

Founded in 1907, Imperial's future builds on a distinguished past, having pioneered penicillin, holography and fibre optics. Today, Imperial combines exceptional teaching, world-class facilities and a habit of interdisciplinary practice to unlock scientific imagination.



## **Our leadership**



Professor Hugh Brady President



Professor Peter Haynes
Provost



Professor Mary Ryan Vice-Provost, Research and Enterprise

Imperial College London 4

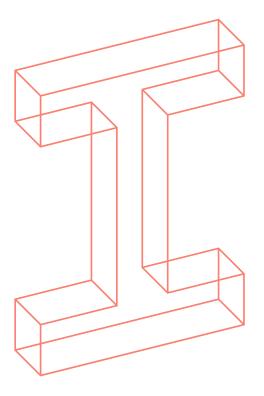
## **Imperial numbers**

2nd in the world (QS World University Rankings 2026)
1st in Europe and the UK (QS World University
Rankings 2026)

University of the Year (Daily Mail University Guide)
University of the Year for Graduate Employment
(The Times and Sunday Times Good University Guide)
Greater proportion of world-leading research than
any other UK university (Research Excellence
Framework)

**Gold Award** (Teaching Excellence Framework)

World class reputation in science, engineering, medicine, business and computing.



# **Imperial numbers**

284

startups over the past five years

£800m

investment raised over the past five years

£1.3bn

University income: nearly £1.3bn

£500m

Research income: more than £500m

14

Nobel Laureates

Fields Medalists

University of the Year 2026 (Daily Mail)
Queen's Anniversary Prize 2021
University of the Year (The Times and Sunday Times
Good University Guide) 2022
UK TEF Gold Award 2023 Athena Swan Silver Award

**4\* REF** 

Greater proportion of world-leading research than any other UK university

Campu

Silwood Park

South Kensington White City Hammersmith Hospital Charing Cross Hospital Chelsea and Westminster Hospital North West London Hospitals Royal Brompton Hospital St Mary's Hospital 192

Countries Imperial researchers have collaborators in

250,000

Alumni in 213 countries

Faci

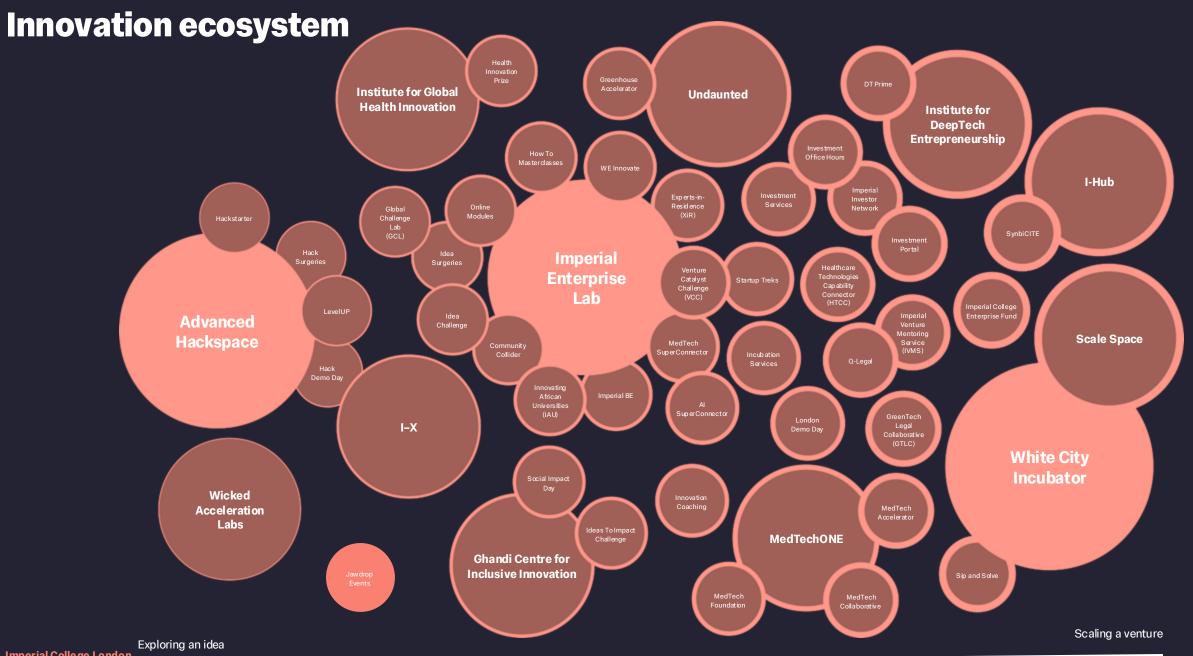
**Engineering, Medicine, Natural Sciences, Business** 

23,000

8,500

Staff

Students 12,000 Undergraduates and 11,000 Postgraduates

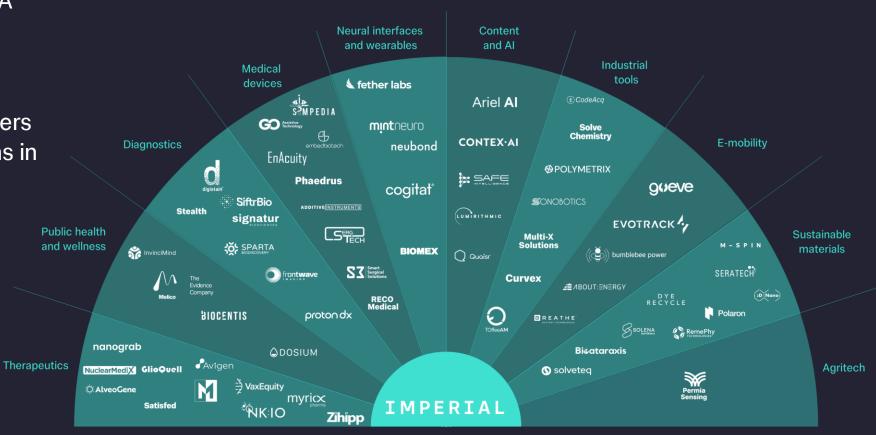


## Imperial capabilities

Imperial is a world-leading university for science, technology, engineering, medicine and business (STEMB). A partner for global industry and a pipeline for extraordinary talent.

Imperial's world-leading researchers create world-changing innovations in a range of sectors, supported by our teams.

Since 2019 there have been: 50+ academic-led spinouts formed 230+ student-led startups founded





## **Academic Strategy**

#### **Imperial today**

#### Leading science

We are a science-based university with a difference. Our enduring STEMB focus, and the exceptional disciplinary foundations that underpin it, are the reason for our continued high-impact trajectory and place among the top ten universities in the world.

#### Interdisciplinary research

We are an ecosystem that thrives on connection and collaboration. The complexity of the challenges before us demands a truly integrated interdisciplinary approach. At Imperial, we forge links between faculties, departments, disciplines, industries, governments and more because we know that greater possi bility for advancement is found at those intersections.

#### Inspiring students

We are a welcoming home for scientific imagination; a place where exceptional minds are enabled with inspiration, resource and freed om so that they might look deeper, dream further and ask big ger questions.

#### Meaningful impact

We have the spirit of a 117-year-old startup with an agility and orientation to the future that belies our age and heritage. Here you will find a culture of discovery, innovation and entrepreneurial thinking, where breakthrough science is chased, translated and applied at incredible speed and with transformative impact.

#### A trusted partner

We are an ally of progress, seen by many of the world's leading knowledge and technology-driven organisations as a cultivator of exceptional talent and future leaders, and trusted as the partner of choice for research, innovation and impact.

#### The legacy of London

We are a global hub in a global city. Our work shapes the world and our community reflects it, brought together by the undeniable gravitational pull of London's energy, creativity, diversity, economy and opportunity.

#### **Imperial tomorrow**

This strategy imagines a path through an unpredictable world that is facing unprecedented challenges. It is a blueprint to ensure we continue to maximise our potential as a force for good in the world, to deepen our rare and specific competencies, and to serve students and society in the uncertainty of tomorrow.

After all, as one of the world's leading research universities, we are purpose-built to engage with uncertainty, and to summon our strengths against it.

This is how we prepare for the expected and the unexpected. This is how we rigorously fulfil our educational mission and our research potential. It is how we shape the future. And it begins with three core aims.

#### 1. Enabling talent

Our strategy will develop the people and skills the world needs now and into the future. We will work to attract, nurture and champion the best local, national and global talent wherever they are, and to empower them with everything they need to make a meaningful difference.

#### 2. Powering research

Our strategy is a plan to strengthen Imperial's enabling environment for discovery, innovation and impact. We will create an even more deeply connected knowledge community and interdisciplinary research powerhouse that will meet the scale and urgency of the moment and respond with intelligence, responsibility and agility to everything that comes next.

#### 3. Amplifying impact

Our strategy will help to accelerate Imperial towards, and scale the impact of, new discoveries, inventions and ideas, and position us as a trusted convenorand partner for knowledge and tech organisations across the globe. We will look beyond our London campuses to our wider network and wider responsibility, honouring our social and civic purpose, in London for the world.

#### **Imperial together**

To ensure our strategy will have a meaningful and enduring impact, we know we must create opportunities for everyone in our community to fulfil their potential – always guided by our values and behaviours: Respect, Collaboration, Excellence, Innovation and Integrity.

#### Great people

We will continue to attract, nurture and support world-class talent from everywhere. Our strength comes from celebrating and harnessing the diversity of our community where everyone contributes their own perspective, experience and skills so that together we can excel in the delivery of our shared mission.

We will champion an inclusive culture and invest in people so that they are inspired and equipped to unleash their potential. We will build and maintain a culture centred on the wellbeing, growth and belonging of our community. We will create a diverse and vibrant community where our values are evident to all, and we are recognised as innovators in every aspect of our work.

#### Great environment

We will create an integrated human, physical and digital ecosystem that fosters and facilitates collaboration and community and promotes discovery, learning and innovation. And we will deliver sustainable campuses to meet our 2040 Net Zero Carbon commitments.

The pace of technological change has never been faster. We will leverage the digital landscape and increased digital innovation to grasp new opportunities that are essential to the achievement of our world-class research and education. We will create a world-class digital experience for students. Our staff will have the tools and facilities they need to undertake world-changing research.

#### Great support

A world-leading academic endeavour must provide everyone with the opportunities and tools they need to thrive. We will support our staff to deliver an inspirational education and to take the inception of a research idea through to publication and translation into real-world application.

We will give our students a consistently inspiring, tailored and supportive experience from application through to their lifelong interactions with Imperial as part of our alumni community. We will foster a culture of innovation and practice of continuous improvement where colleagues are empowered to combine their strengths collectively to turn great ideas into an even better service.

## **Key Initiatives**



**Transition to Zero Pollution** 

An initiative to foster systems thinking to deliver a sustainable zero pollution future.



#### **DT-Prime**

A programme to transform deep technology research into investable ventures with transformational potential.



#### Schools of Convergence Science

Focusing on key interational and multidisciplinary areas of science, technology, policy and innovation that Imperial leads

### **Services and support for industry**



#### **Clinical samples**

Imperial College Healthcare
Tissue Bank and the
Multiple Sclerosis &
Parkinson's Tissue Bank
provide industry partners
with clinical samples for
their own R&D purposes.





#### **Clinical trials**

The Imperial Clinical Trials Unit works on major international clinical trials. ICTU can lead studies at all stages of clinical development from advising on unmet medical needs in a therapeutic area, designing, co-ordinating or monitoring international studies to the analysis and communication of results.





#### **Diagnostics evaluation**

The London In-Vitro Diagnostic Cooperative provide a unique diagnostics evaluation service for diagnostics developers. Combining world-leading expertise in human factors studies with an extensive clinical network, they can provide real-world evidence needed at every stage of development.



## **Tackling Antimicrobial Resistance (AMR) through collaboration**



A £45 million investment from GSK to the Fleming Intiative is key to underpinning this vital area of work, tackling AMR and aiding effective drug discovery to save lives across the world, now and for the future.

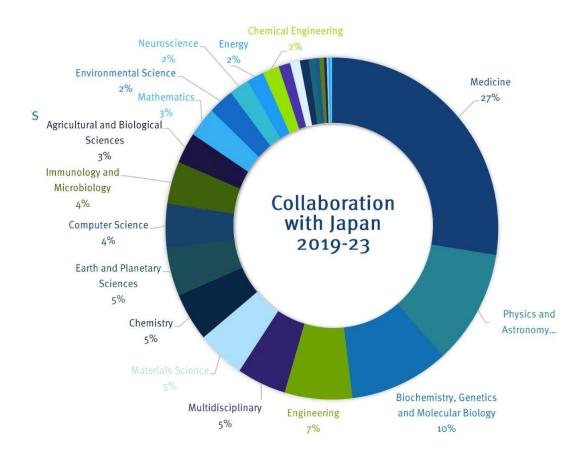
The funding was announced as part of Imperial's presence at the UN general assembly in New York.



## Imperial's research with Japan

Imperial works closely with most of Japan's top universities

- Kyushu University Active collaboration for 20 years focusing on energy materials
- Keio University Institute for Security Science and Technology working with Keio on setting up an international network of universities to address cybersecurity, including collaboration with Hitachi
- Tokyo Institute of Technology Strategic ongoing research collaborations and jointly participated in Global Fellows Programme
- Kyoto University Exchange of best practice and research between the two institutes in addressing global antimicrobial resistance in the UK and Japan.



# **Imperial with Japan**

As one of the world's most international and innovative universities, we are seeking to grow partnerships in Japan and around the world

Imperial has worked with over 25 Japanese businesses in the past decade, in projects worth approximately

£10 million



# **Building collaboration**

# Imperial's offer to business

There are many different ways to work with Imperial.

Imperial Enterprise offers our partners:

- The expertise of Imperial academics
- The talent of our students
- Entrepreneurial space across our
   9 campuses
- Our high-tech facilities

And much more. Talk to us about our flexible partnering approach and find out more.

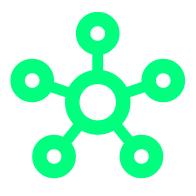


**Entrepreneurship** 



Consultancy





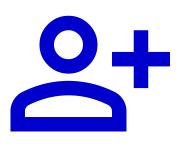
**Engagement and Networking** 



Industry partnerships



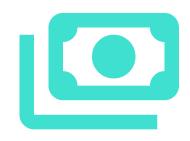
**Startup and co- location spaces** 



Recruitment



**Executive Education** 



**Commercialisation and Investment** 

Imperial College London

## We offer our partners:

Imperial Enterprise offers partners access to and participation in our innovation ecosystem



The **expertise** of Imperial academics



The talent of our students



The **entrepreneurial spaces** on our 9 campuses



Our high-tech facilities

We have built an ecosystem tailored to the specific needs of academic and student founders

4,000+ Academics **21,000 Students** Research **Inspire White City startups Explore** Invent **Spin-in Imperial Enterprise Lab Validate Develop Imperial** Venture **DT-prime** Mentoring Service (IVMS) Imperial Techcelerate MedTechONE **Startup Spin-out** Global Challenge Lab 23 Impact Acceleration **White City Incubator Imperial College Incubate Enterprise Fund II** Undaunted

Scale

SCALE

Venture

Fund

### **Major partners**

250+ Corporate partners Over £50m research funding per year

Helping businesses innovate globally

sanofi













**SAMSUNG** 







































































## **Flexible Partnering Approaches**

Flagship industryfunded centre

Corporate engagement

Proof of concept funds

Multi-university industry collaboration

Doctoral training centres

**Sponsored research** 

Therapeutic fund
APOLLO
THERAPEUTICS

Multidisciplinary industry collaborations

**Contract research** 



## **Agilent Measurement Suite at Imperial**

Established March 2018, £4m state of the art laboratory hosted at Imperial's Molecular Sciences Research Hub

36 instruments supporting interdisciplinary research in areas such as clinical diagnostics, biopharmaceuticals, energy and chemicals, environmental science, food testing and agriculture, and materials research

Support development of PhD, MSc and undergraduates through establishment of a demo, training and seminar facility

Drive further collaborative projects to the benefit of both partners, and to move cutting edge research forward.



# **Agilent Technologies**

"We look forward to continuing the partnership with Imperial College London and working together on bringing more solutions and innovation to the scientific community"

Maria Angeles Diaz EMEA and India Sales Vice President & General Manager at Agilent Technologies

## **Immersive Partnership: Shell**

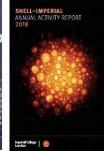
- 340 people involved
- 11 departments
- 5 research centres
- 100+ Graduates hired
- £40m R&D Portfolio
- 150+ R&D consultancy contracts













#### NEW METHANE AND ENVIRONMENT PROGRAMME (MEP)

The Methane and Environment Programme (MEP) was launched in May 2018, with the aim of conducting innovative research to improve our understanding of methane emissions and other environmental impacts associated with gas systems, and how to reduce them.

The team have already begun publishing some high impact research articles on the use of global warming potentials (GWP) and on the end-uses of gas for shipping and for hydrogen production. MEP works closely with industry partners including the Oil and Gas Climate Initiative and is a core member of the Methane Guiding Principles, an industry-led initiative to better understand, manage and eliminate methane emissions from gas supply chains.



## **Better turbo chargers with MHI**



MHI is a key partner for Imperial, with a major partnership that began in 2005. The collaboration has had a significant impact on MHI, with substantial improvements in advanced measurement techniques and simulation tools.



https://www.imperial.ac.uk/news/194666/imperial-mitsubishi-launch-turbocharger-centre-develop/

MHI-Imperial Future of Boosting Innovation Centre: Partnering with world-leading leading manufacturer in Japan to improve turbocharger design and develop cleaner engines





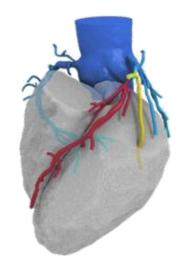
"The work with MHI has not just advanced our understanding of exhaust turbochargers for cleaner engines, but it also had enabled new concepts based on this understanding"

Professor R Martinez-Botnas

## **Engagement with a healthcare SME**

Bringing personalised heart disease diagnosis closer

A new mode of engagement partnering with California SME to accelerate turning cutting edge science into ground-breaking products that can postively impact how patients with suspected heart disease are diagnosed and managed.





"The collaboration with Heartflow will not only open new and exciting research directions, but it will also pave the way for bringing our latest deep learning technology into clinical practices and thus will have real impact on the healthcare of thousands of patients"

Dr B Glocker

# **Cultivating strategic partnerships to foster knowledge exchange**

#### Examples of Industry funded R&I Centres

- Co-located staff
- 2-way engagement
- Maximising impact
- Fast response
- Flexibility
- Trusted partners



DIGITAL ROCKS
SUSTAINABLE GAS

ADVANCED INTERFACIAL MATERIALS

**MOBILITY & LUBRICANTS** 

SHELL LEONARDO CENTRE



VIBRATION UTC
NUCLEAR ENG UTC







PETRONAS CENTRE FOR ENGINEERING OF MULTIPHASE SYSTEMS







MEASUREMENT SUITE AT WHITE CITY



MICROSYSTEMS

**IMAGING HUB** 



HEARTFLOW LAB



Engineered Medicines Lab



**ROBOTIC VISION LAB** 



SPARK IGNITION ENGINE COMBUSTION





QUANTUM SIMULATION



RAIL TRANSPORTATION MANUFACTURING



LIGHTWEIGHT MATERIALS



HITACHI AND IMPERIAL CENTRE FOR

DECARBONISATION AND NATURAL

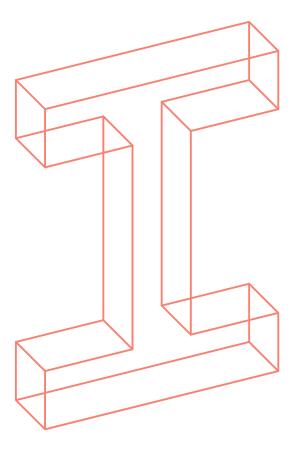
CLIMATE SOLUTIONS

**DIGITAL DEMONSTRATOR** 

## **Research partnerships**

Imperial Enterprise helps set up research collaborations with Imperial's academics that can help your company innovate and find solutions to its business challenges.

With backgrounds in industry and academia, our team is perfectly placed to help academics and businesses make the most of these opportunities.



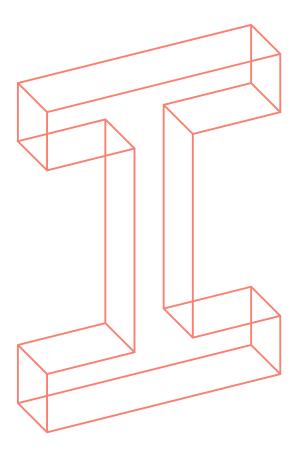
## Licensing

Companies can innovate and enter new markets by licensing technologies developed in Imperial's labs.

You can view our technologies available for licensing at Imperial.tech, the platform we use to promote Imperial researchers' innovative technologies.



More information



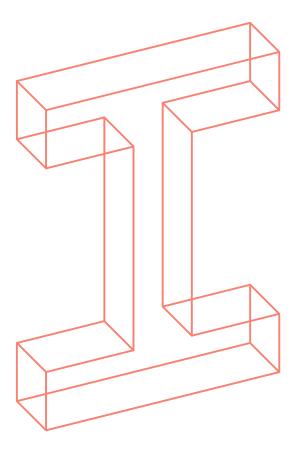
## Consultancy

With a pool of almost 4,000+ Imperial researchers and academics at their fingertips, Imperial Enterprise has been finding the right consultants to meet the challenges of external organisations for over 30 years.

From expert advice to use of specialist equipment, training, testing and analysis, we provide bespoke solutions to meet your needs.

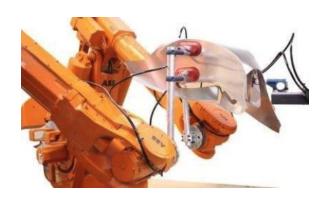


More information



### **Consultancy examples**







#### **Disperse**

Consultancy for generalpurpose guided wave inspection software developed through research into nondestructive evaluation

#### **Robofold**

Imperial's expertise in finite element modelling applied to help take the Robofold system into mass production

# **Proteostatis Therapeutics**

Imperial's expertise in Cystic fibrosis, drug development and clinical trials helped Proteostatis Therapeutics assess potential treatments to improve lung function

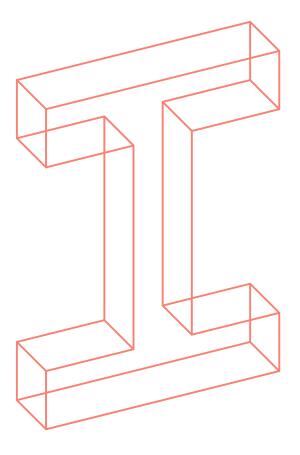
## **Imperial Business Partners**

Imperial's flagship corporate membership programme provides curated access to the best of Imperial's people, technologies, expertise and facilities.

Using events, consultancy, training and technology foresight, we give members practical, actionable insights that help them shape the future of their business.



More information



## **Imperial Business Partners Pathfinder**

# An energy provider gains insights into the electricity mix

IBP leveraged the expertise of Imperial's Energy Future Lab to commission a report into electricity market design

Report aimed to assess how electricity markets can be reimagined for a significantly decarbonised electricity production mix by 2050

Covered ways in which market design affects investment in renewable energy

IBP curated roundtable discussion with the client, academic authors, and members of the UK's Department for Business, Energy and Industrial Strategy



More information



# Thank you

ご静聴ありがとうございました