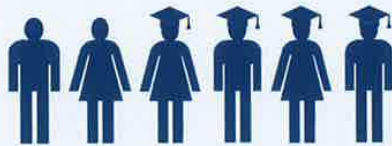




# Cambridge in Europe

**10%** of undergraduate students | **17%** of graduate students



are from EU countries outside the UK



Erasmus agreements for student exchange with European universities including: **19** with Germany; **13** with Italy; **12** with Spain; **11** with France

**14%**



of the University's permanent academic staff are from EU countries outside the UK

**27%**



of postdoctoral researchers are from EU countries outside the UK

**77**



Alumni Groups in Europe, outside the UK

**£171m**

in grants for the University of Cambridge from EU research funding (2007-2013). Cambridge received more than any other European university

Cambridge is a key partner in the

**€ 1bn**



EU Graphene Flagship



The University of Cambridge leads the world in the number of European Research Council grants received by a university with

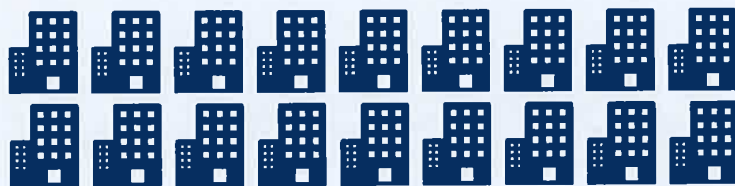
**136 grants**

The Vice-Chancellor of Cambridge chairs the



**EU Advisory Board**

of the Russell Group of leading research universities



**18**

Cambridge University Press and Cambridge Assessment each have nine offices in EU countries outside the UK



# Global Cambridge in Numbers



Cambridge is consistently ranked among the

**top 3**

universities worldwide

**1,800+**

members of academic staff are from outside the UK



**65%**



of postdocs are from outside the UK

Cambridge academics work with colleagues in



countries from Australia to Zimbabwe

Over

**56%**



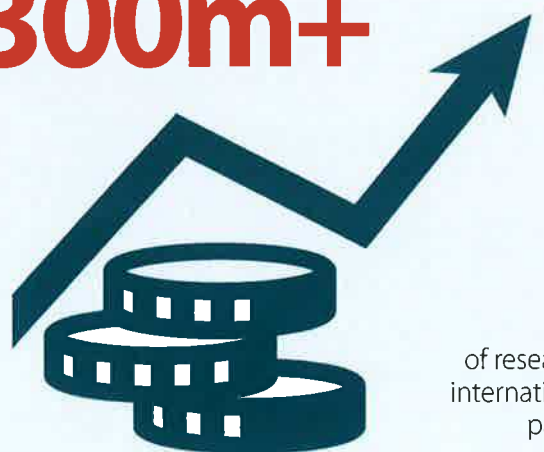
of publications by Cambridge academics have an international co-author



The University of Cambridge leads the world in the number of European Research Council grants received by a university with

**136 grants**

**£300m+**



of research funding from international sources in the past five years

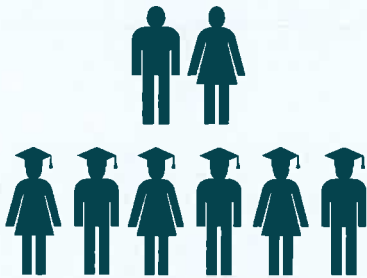
# Global Cambridge in Numbers

**20%**

of undergraduate  
students

**63%**

of graduate  
students



come from outside  
the UK



Students from

**73**

countries receive scholarships  
from the Cambridge Trusts



Cambridge provides teaching and  
research resources in

**170+**

languages



registered  
international  
societies

**330**



alumni groups worldwide  
outside the UK



countries where pupils take the  
Cambridge IGCSE, making it the  
world's most popular international  
qualification for 14-16 year olds

Cambridge University Press and  
Cambridge Assessment have

**76**

subsidiary offices outside the UK in



**29**

countries



the university of Cambridge has  
strategic research partnerships on

**5**

continents

# Cambridge *research* in numbers


## The University

There are currently


over  
**1,500**  
tenured academics



more than  
**3,500**  
contract research staff

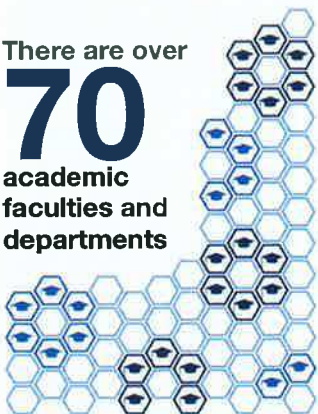


and almost  
**4,000**  
PhD students at  
the University of  
Cambridge



The University's teaching and research is organised into six schools:  
**Arts and Humanities, Biological Sciences, Clinical Medicine,  
Humanities and Social Sciences, Physical Sciences, and Technology**

There are over  
**70**  
academic  
faculties and  
departments



More than  
**140** University  
centres &  
institutes  
contribute to specific  
areas of research



**12** Strategic  
Research  
Initiatives  
and  
**7** Strategic  
Research  
Networks  
build on areas of  
existing research  
strength to tackle  
multi-disciplinary  
challenges



**1 of 10** ★★  
leading universities  
in the **International  
Alliance of Research  
Universities** ★★

**1 of 21** ★★  
leading universities  
in the **League of  
European Research  
Universities** ★★

## Funding

In 2012–13  
the University received

**£332m**

in research grants  
and contracts



**107**  
Starting Grants and  
Advanced Grants from  
the European Research  
Council – more than any  
other university in Europe

**1st**  
The highest UK recipient  
of European Commission  
research & technological  
development funding  
(November 2010)



## Partnership

The University works with

over **200** industrial partners  
and **700** UK and overseas organisations  
sponsor research at Cambridge



In 2012–13, as a result of its research, the University

...signed  
**95**  
licences



...filed  
**163**  
new patents



...and formed  
**5**  
companies



## Research in action

**1<sup>st</sup>** The University's overall ranking in the most recent (2008) Research Assessment Exercise, coming top in **19** research disciplines

Over  
**13.14**  
citations per FTE from publications published in 2011 on Scopus



In 2012 academics published  
**160** books and nearly  
**400** chapters and presented papers at over  
**500** conferences



Cambridge academics contribute to approximately



**12,000**  
publications each year

**23**



Cambridge academics were elected to the Fellowship of the Royal Society between 2010–13

**28**



Cambridge academics were elected to the Fellowship of the British Academy between 2010–13

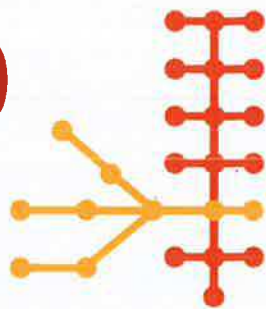
**90**



affiliates of the University of Cambridge have been awarded the Nobel Prize

## Public engagement with research

Around  
**35,000**  
people attend the  
**200** events at the  
Cambridge Science Festival each year



The Festival of Ideas attracts

**15,000**  
visitors to  
**200** events in  
**30** locations over 2 weeks



Figures are based on information available at the time of publication – February 2014

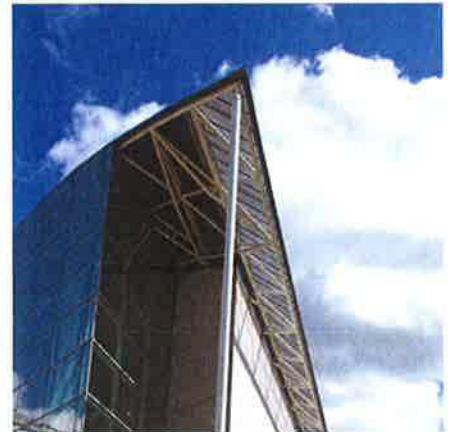
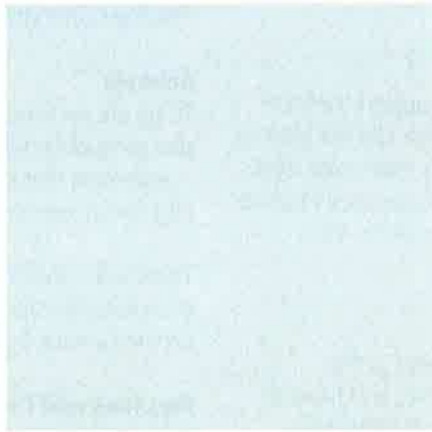
CAMBRIDGE &

the way it works

With more than 18,000 students from all walks of life and all corners of the world, nearly 9,000 staff, 31 Colleges and 150 Departments, Faculties, Schools and other institutions, no two days are ever the same at the University of Cambridge.



This leaflet offers a brief overview of the people, places and processes that make the University of Cambridge special.



At the heart of this confederation of Departments, Schools, Faculties and Colleges is a central administration team. It is small because the Colleges are self-governing and teaching staff carry out much of the daily administration at Cambridge.





## People

The University has a central senior administrative team, responsible for the management of the University. Academic, research and support staff work throughout the University and Colleges; they are crucial to the University's success and reputation.

### The Chancellor and Vice-Chancellor

The Chancellor is elected for life as the constitutional head of the University although the role is now largely ceremonial. The Chancellor is elected by the Senate, which comprises all senior graduates of the University.

The Vice-Chancellor is appointed for a period of seven years and is the University's main academic and administrative officer.

### Pro-Vice-Chancellors

Five Pro-Vice-Chancellors are appointed to support the Vice-Chancellor. Their responsibilities are determined by the Vice-Chancellor and the Council – the University's main executive and policy-making body – and currently include planning and resources, research and education. The office of Pro-Vice-Chancellor is limited to six years.

### The Registry

The Registry, reporting to the Vice-Chancellor, is the principal administrative officer of the University and head of the Unified Administrative Services, which is divided into functional divisions for the day to day management of the University.

### Proctors

Two Proctors are elected annually on the nomination of the Colleges. They are primarily disciplinary and ceremonial officers, responsible for maintaining good order in the University. They are supported by four Pro-Proctors.



## Structure

The University is a confederation of Schools, Faculties, Departments and Colleges. The Colleges are governed by their own statutes and regulations, but are integral to the make-up of the University of Cambridge.

### Colleges

Students live, eat and socialise in one of the University's 31 autonomous Colleges. Undergraduates receive College supervisions – small group teaching sessions – regarded as one of the best teaching models in the world.

Each College has its own internal procedures. They select their own students, subject to University regulations, and most admit both undergraduate and postgraduate students. College representatives sit on the University Council and Finance Committee.

### Schools

There are six Schools, which each form an administrative grouping of Faculties and other institutions. They are: Arts and Humanities, Biological Sciences, Clinical Medicine, Humanities and Social Sciences, Physical Sciences, and Technology.

There is a Council of each School – including representatives of its Faculties and Departments. The Schools are represented on the General Board.

### Faculties and Departments

University Faculties organise teaching and research into individual subjects or groups of subjects. Their work is normally organised into sub-divisions called Departments.

Centres of studies are controlled by committees of management, bringing together representatives from several disciplines.





## Governance

The University is governed through central bodies, principally the Regent House, the Council and the General Board of the Faculties. These bodies include representatives from across the University.

### The Regent House

The Regent House is the governing body and principal electoral constituency of the University. It has more than 3,800 members, including University Officers, and Heads and Fellows of Colleges. It makes and amends the regulations that govern the University.

### The Senate

The Senate was the governing body of the University until 1926. It consists of all holders of the Cambridge MA or other higher degree and all current members of the Regent House. The Senate now elects the Chancellor and the High Steward, the high officers of the University.

### The Council

The Council is the principal executive and policy-making body of the University, reporting to the Regent House. It has overall responsibility for administration, defining the University's mission, planning its work and managing its resources. It also deals with relations between the University and the Colleges. The Council includes 16 elected academic members, four external members and three student members. The Vice-Chancellor is chair of the Council.

The Council has many standing committees including the Finance Committee and the Planning and Resources Committee.

### The General Board of the Faculties

The principal duty of the General Board is to advise the University on educational policy and to control resources. It is responsible for maintaining a high standard of teaching and research.

### The Board of Scrutiny

The governance of the University is overseen by the Board of Scrutiny; a watch-dog which includes Proctors, Pro-Proctors and eight elected members of the Regent House.

## Processes

The *University Reporter* is the official journal of the University, publishing a comprehensive record of University business. It includes Graces, Reports, Notices and Discussions, which constitute the main processes by which the University is governed.

### Graces

The Council presents a Grace or motion for decision to the Regent House. If no objection or amendment is made by at least 25 members of Regent House within ten days, the Grace is deemed to have been approved. If a vote is called, voting is by postal ballot.

### Reports

Complex proposals are presented in Reports, which are first put up for Discussion (open debate) in the Senate House. The body responsible for originating the recommendation considers remarks made and advises Council on a response.

### Notices

The Council's response to remarks made in a Discussion is given in a Notice published in the *Reporter*. A Notice normally ends with the submission of a Grace to the Regent House, incorporating any amendments made following the Discussion.

### Discussions

Discussions are the forum in which members of the University can comment publicly on University business. They take place on Tuesdays at 2pm and are usually held in Senate House.



## Glossary of Cambridge terminology

**Academic year** – Extends from 1 October to 30 September and is divided into three terms, two vacations and the Research Period.

**Admission** – Undergraduate students are selected and admitted by the Colleges, through the agency of the Cambridge Admissions Office. Graduate students apply through the Board of Graduate Studies, which helps to arrange admission to a College.

**Congregation** – A meeting of the Regent House for the formal conduct of certain items of University business, principally admission of degrees. Congregations take place in the Senate House regularly throughout the year.

**Discussions** – Discussions are the forum in which members of the University can comment publicly on University business. They take place on Tuesdays at 2pm and are usually held in the Senate House.

**Emeritus/Emerita** – A term applied to a Vice-Chancellor, Professor, Reader, and holder of certain other senior positions, who has retired after the age of sixty. In Cambridge, the term is not conferred as an individual mark of distinction.

**Esquire Bedells** – Two officials whose duties are ceremonial. They have certain important responsibilities at congregations. The Senior Esquire Bedell has a general responsibility for the correct formulation and wearing of academical dress.

**Fellow** – A senior member of a College, elected to a particular position of authority and responsibility in relation to the academic work and government of the College.

**Full term** – The central portion of each term during which teaching takes place and members of the University are normally expected to be in residence.

**General Admission** – Three congregations held towards the end of June each year are termed 'Days of General Admission to Degrees'. These are the occasions on which the majority of undergraduates who have completed their final year proceed in person to their first degrees. Degrees are also conferred at eight other congregations in the course of the year.

**Long Vacation** – The three terms are separated by three vacations (Christmas, Easter and Long Vacation) during which undergraduate teaching is suspended. The Long Vacation is also known as the Research Period.

**Master of Arts** – In most UK universities, the Master of Arts is a degree awarded by examination. At Cambridge, the MA is conferred by right on holders of the BA degree of the University and on certain other senior members. It is not available as a postgraduate qualification.

**Matriculation** – New students of the University matriculate (or join the roll) when they enrol or register at their College, signing a declaration that they will obey the University regulations. There has been no formal University ceremony since 1962.

**Notices** – The Council's response to remarks made in a Discussion is given in a Notice published in the *Reporter*. A Notice normally ends with the submission of a Grace to the Regent House, incorporating any amendments made following the Discussion.

**Ordinances** – The University Statutes allow the University to make regulations, known as Ordinances, for the proper conduct of its affairs. They are made either by Regent House, the Senate or the General Board.

**Residence** – Most students and academic staff are required to be in residence during each period of Full Term; unless specially exempted, staff and students must live within a prescribed radius of Great St Mary's Church. Students may not generally proceed to their degrees unless their Colleges certify that they have 'kept terms' by being in residence for the specified period.

**Scarlet Day** – Days on which Doctors of the University are required to wear in public their festal or scarlet gowns. The permanent list of such days is defined by Ordinance, but in addition the Vice-Chancellor may prescribe other days as scarlet days if they are occasions, for instance, of national rejoicing or celebration, or of other special importance to the University.

**Senate** – Until 1926, the governing body of the University; it consists of all those holding the degree of Master of Arts or any other higher degree. It elects the Chancellor and the High Steward. Membership confers senior status and certain privileges such as borrowing books from the University Library.

**Term** – The academic year is divided into three Terms (Michaelmas: October to early December; Lent: January to early March; and Easter: April to mid-June).

**Tripos** – A University examination, passing which qualifies a candidate partly or wholly for admission to an Honours Degree.

These pages outline some of the principal elements regarding how the University governs itself and define some of the specific Cambridge terminology. They are not an authoritative statement of the legal position in relation to the rights and duties of any body or bodies. For that, interested readers are referred to the Statutes and Ordinances of the University.

# CAMBRIDGE & its Colleges

## What is 'Cambridge'?

Cambridge can refer to both the University of Cambridge and the 31 Cambridge Colleges. The Colleges and the University work together to provide the teaching and research environment that is Cambridge.



## What are the Colleges?

The Colleges are autonomous, self-governing communities where students and academics live, work, learn and socialise.

## What does the University do?

The University provides the central resources for research and teaching, such as lecture theatres, faculty libraries and laboratories; sets the curriculum; conducts the examinations; and confers the degrees.



## How many Colleges are there?

There are 31 Colleges. Three are for women only and two admit only postgraduates. The remainder house and teach anyone enrolled in courses of study or research at the University.



## Is it possible to be a student at the University without belonging to a College?

No. A student must be admitted to a College before he or she can study at the University; they remain a member of that College for life.





## Questions and answers

### When were the Colleges founded?

The oldest College – Peterhouse – was established as a community of scholars in 1284; the most recently purpose-built College, Robinson College, was founded in 1979. The other 29 Colleges span the intervening centuries, and were founded by kings and queens, noblemen and women, religious orders, guilds and business people. Over the years each has acquired its own rich history of traditions and very individual atmosphere.

### Why is the College system important?

The collegiate structure gives a strong sense of community. The Colleges were a medieval innovation that allowed the University to grow as a national, then European, then international force, and yet remain a supportive environment for scholars and students. Within each College, academics and students of all disciplines are brought together, encouraging a cross-fertilisation and free exchange of ideas.

### Is a College like a hall of residence?

No. A Cambridge College plays a far more significant part in an undergraduate's and graduate's life than a hall of residence. As well as food and accommodation, students also receive supervisions – individual and small group teaching sessions – in their College, which complement the lectures and practical classes organised by the University. The College also provides a welcoming community for its students. Each College has a Junior Combination Room (JCR) for undergraduates and a Middle Combination Room (MCR) for graduate students. JCR and MCR officers represent student views on College committees.

### What do the Colleges offer their students apart from specialist teaching?

In the past, College life revolved around the three great communal areas – the chapel, the library and the dining hall. Today, each College has living accommodation, a library, a bar and sports facilities, and some have a theatre. All Colleges have their own clubs and societies, offering non-academic activities for students to take part in.

### How do the Colleges operate?

Each College is an autonomous institution with its own property and income, and has its own governing body that runs it and decides on policy. The Colleges appoint their own staff and are responsible for selecting undergraduate students, in accordance with University regulations. As each

individual College operates autonomously and chooses its own members, this very much defines its character.

### Who exactly governs the Colleges?

The governing body of a College consists of a Master or Mistress (or Provost, President, Principal or Warden) and some or all of its Fellows. A Fellow is an elected senior member of a College whose primary duty is teaching, research or administration.

### Who are the other members of a College?

The College system works through Tutors (led by Senior Tutors), who are responsible for the pastoral care of students; Bursars, responsible for finances and buildings; and Directors of Studies, who have specific responsibilities in relation to courses of study and the academic progress of students. Other College officers include Deans or Chaplains, whose concern is the spiritual welfare and academic progress of students, and Supervisors, who carry out the small group teaching.

### How do these autonomous institutions work effectively with the University?

Involvement with the governance of the University is ensured through College representatives on the Council (the University's principal executive and policy-making committee), the Finance Committee, the Planning and Resources Committee, and numerous other University and intercollegiate committees. In addition, most but not all of the academic staff of the University are either Fellows or members of the Colleges, and most Fellows of Colleges also hold University teaching appointments.

### What are the benefits of the College system for students?

**Teaching:** The supervision system is regarded as one of the best teaching models in the world and is considered to be one of the main reasons for the University's success in external reviews of learning and teaching. Colleges also offer Junior Research Fellowships to support early career academics.

**Accommodation:** Almost all undergraduates and many graduate students live in College accommodation for the duration of their time at Cambridge.

**Welfare:** A variety of support systems ensure that students are treated as individuals, allowing overseas students in particular to be fully integrated.

**Financial support:** Many Colleges offer awards for their own members, in addition to funds available from the University.



#### What is 'widening participation'?

Widening participation is a generic term for work undertaken to encourage currently under-represented groups to apply to and succeed in higher education.

#### Which groups are under-represented at Cambridge?

The same groups that are under-represented at many other universities: those from the lowest socioeconomic groups. We also work to encourage applications from the state sector, students from further education colleges, students from certain ethnic minority backgrounds and mature students.

#### When did Cambridge start widening participation?

Cambridge has reached out to scholars since its creation 800 years ago. We have always encouraged applications from under-represented groups – long before the government's formalised programmes to widen access to a university education.



#### Why is Cambridge investing in widening participation?

The University of Cambridge is looking for the best students and we know that they come from all backgrounds. We want to help schools raise aspirations and encourage students who are academically gifted.



## Questions and Answers

### What are the challenges in widening participation?

Inaccurate perceptions of Cambridge remain a barrier, as do misunderstandings about the Cambridge application process and the qualifications required. Identifying disadvantaged students with the potential to succeed at the University of Cambridge can also be a challenge.

### What about cost? Isn't studying at Cambridge more expensive?

No. Like many other universities, Cambridge will be charging UK/EU students tuition fees of £9,000 per year, which can be covered by a loan and therefore, is not payable up front. College accommodation throughout the degree course and an extensive bursary scheme mean that studying at Cambridge is often less expensive than other universities.

### How does Cambridge dispel myths and encourage applications?

The most effective way to change attitudes is for pupils, mature students and teachers to experience Cambridge first hand. Our widening participation initiatives include more than 100 University and College open days, taster days, events for teachers and higher education advisors; free residential subject-specific summer schools; visits to schools; and Oxford and Cambridge Student Conferences held around the country.

### Who runs your widening participation activities?

Cambridge Admissions Office has a team dedicated to widening participation and organising a huge range of events and activities. Colleges are also linked with local authorities in designated areas of the country and staff host visits by groups of pupils and give talks in schools. Cambridge University Students' Union runs initiatives including a shadowing scheme to enable prospective applicants to meet current students. Many schemes are run in conjunction with outside organisations, such as the Sutton Trust.

### How many people take part in these initiatives each year?

In 2009/10 some 157,000 pupils and teachers took part in face-to-face widening participation activities across the country and in Cambridge.

### Isn't the application and interview process very complicated and confusing?

Recent changes have been made: the separate Cambridge application form and fee have been abolished and the application process is now the same as for other UK universities. Our interviewers are trained to make applicants feel at ease: the substance of the responses given, not the style of delivery, is what matters.

### Do 'disadvantaged' applicants get special consideration?

The Cambridge Special Access Scheme allows schools to indicate whether applicants come from a family with no record of higher education, or if their home life or education has been significantly disrupted. Such applicants need to demonstrate the same academic potential as other applicants.

### Are all these initiatives making a difference?

Yes. The proportion of state-educated students rose from 50 per cent in 1996 to 59 per cent in 2010; black and minority ethnic students grew from 6 per cent in 1990 to 15 per cent in 2010.

### Does widening participation lower academic standards?

No. There has been no lowering of academic expectations for courses and no fall in degree results. Our commitment to excellence is borne out by Cambridge's continued high ranking in university league tables.

### What next?

Progress is encouraging, but more remains to be done. Generous donations are allowing much needed investment in further Cambridge access initiatives, including the expansion of the Widening Participation team within the Cambridge Admissions Office.

## Further information on widening participation initiatives at Cambridge

Jon Beard is Director of Undergraduate Recruitment. Tom Levinson is Head of Widening Participation.

Contact: Cambridge Admissions Office, [admissions@cam.ac.uk](mailto:admissions@cam.ac.uk); tel: 01223 333308; website: [www.cam.ac.uk/admissions/undergraduate](http://www.cam.ac.uk/admissions/undergraduate)

Cambridge University Students' Union runs a range of access initiatives. Contact: [access@cusu.cam.ac.uk](mailto:access@cusu.cam.ac.uk); tel: 01223 335654; website: [www.cusu.cam.ac.uk/prospective/](http://www.cusu.cam.ac.uk/prospective/)

To find out more about open days, applications and financial support, information for teachers and advisors, and College area links: [www.cam.ac.uk/admissions/undergraduate](http://www.cam.ac.uk/admissions/undergraduate)



# CAMBRIDGE & the community

## What is the relationship between the University and the local community?

The University has had its home in Cambridge for over 800 years. It is an integral part of the local community and plays a valuable role in enhancing the lives of both the residents and visitors.

## What about the 'global' community?

The role the University plays in the world is equally significant. Our student population is drawn from 135 countries, while the results of Cambridge's ground-breaking research benefit people the world over.



## How does the University interact with the community?

The University works with local and global communities in many ways. These range from educational and employment opportunities, to festivals, museums, public lectures, and charitable and volunteering activities.

## Who gets involved in volunteering?

Every year Cambridge staff and students invest more than 370,000 hours of their time in voluntary and outreach work, with more than 1 million people annually participating in and benefiting from community activities.

## How much is raised for charity?

Around £1 million annually is raised and donated to charity by University staff and students.



UNIVERSITY OF  
CAMBRIDGE

[www.cam.ac.uk/community](http://www.cam.ac.uk/community)

## How does the University work with the community?

### Supporting the local economy

The University is a major employer in the city of Cambridge and a large proportion of its expenditure finds its way into the local economy. The community continues to benefit from the *Cambridge Phenomenon*, the successful growth of science-based industry around the city, much of it derived from research conducted in University laboratories.

### Museums and collections

The University has eight world-class museums. The largest of these – the Fitzwilliam Museum – is home to works of arts and antiquities spanning centuries and civilisations. The University's Botanic Garden, opened in 1846, welcomes more than 150,000 visitors each year. [www.cam.ac.uk/museums/](http://www.cam.ac.uk/museums/)

### Programmes for schools

Our schools programmes, such as the Millennium Mathematics Project, support students and teachers both nationally and internationally. Search our directory for programmes that might be relevant to your school. [www.cam.ac.uk/communitydirectory](http://www.cam.ac.uk/communitydirectory)

### Institute of Continuing Education

The University of Cambridge Institute of Continuing Education provides a wide range of programmes for adult learners to study at university-level on a part-time basis. [www.cont-ed.cam.ac.uk](http://www.cont-ed.cam.ac.uk)

### Cambridge Science Festival

The annual Cambridge Science Festival is the largest free science festival in the UK, attracting 30,000 people each March to its lectures, workshops and events. With over 160 activities for all ages, it offers something for everyone. [www.cambridgescience.org](http://www.cambridgescience.org)

### Festival of Ideas

Cambridge is also home to the Festival of Ideas, the UK's first and only integrated arts, humanities and social sciences festival. Each October, visitors of all ages are offered the chance to understand more about the world we live in, on a global and local scale, with over 100 free events in history, literature, languages, drama, art and much more. [www.festivalofideas.org](http://www.festivalofideas.org)

### Open Cambridge weekend and Bridge the Gap charity walk

Open Cambridge is a weekend of tours, talks and open access held every September. University and College buildings and collections go on show for families, local residents and

community groups. The weekend includes the highly popular 4.5 mile Bridge the Gap charity walk through the Cambridge Colleges. [www.cam.ac.uk/opencambridge/](http://www.cam.ac.uk/opencambridge/) and [www.bridgethegapwalk.org/](http://www.bridgethegapwalk.org/)

### The 800 Wood

As part of the 800th Anniversary celebrations, the University created the 800 Wood consisting of more than 15,000 trees. This 10-hectare woodland near Madingley village is open to the public to enjoy.

### The Cambridge Business Community Action Network

The University of Cambridge co-ordinates the Cambridge Business Community Action Network (CBCAN). CBCAN is a group of businesses in Greater Cambridge that works to impact positively on the local community.

[www.admin.cam.ac.uk/offices/communications/community/cbcan/](http://www.admin.cam.ac.uk/offices/communications/community/cbcan/)

### Volunteering

More than 8,000 University staff and students help the local community by volunteering for many community programmes. Student groups also run programmes such as Contact's befriending scheme for the elderly.

### Making a global impact

In addition to its work in the local community, the University also has a worldwide reputation for other aspects of its work and its impact is felt in communities around the globe. For example, Cambridge Assessment offers qualifications in more than 150 countries, while Cambridge University Press produces text books for schools in virtually every country of the world.

Our students and members have also made an impact in the wider community by becoming prime ministers and presidents, Nobel Laureates, great writers and performers. From a diversity of backgrounds they have become leaders the world over: the University has educated 14 British prime ministers, as well as Lee Kuan Yew and Jawaharlal Nehru, the first prime ministers of Singapore and India respectively.

### Working with us

The University supports community and outreach work and offers practical support to nurture charitable, educational and voluntary partnerships between the University and the community. If you represent a school or community group and would like to work with the University, please get in touch: [www.cam.ac.uk/communityaffairs](http://www.cam.ac.uk/communityaffairs)

If you are interested in public events, talks and other activities the University of Cambridge offers to the community, please visit: [www.cam.ac.uk/whatson](http://www.cam.ac.uk/whatson)



# CAMBRIDGE & its heritage

## A history of discoveries

Over the centuries, Cambridge discoveries and inventions have changed our understanding of human life, matter and the universe – and changed the way we live our lives.

**1687** Isaac Newton, the father of calculus and modern mathematics, publishes *Principia Mathematica*, his laws of motion and his law of universal gravitation.

**1812** Charles Babbage has his first ideas for a calculating machine and later starts work on his 'difference engine'. Although it is never completed this work heralds later inventions leading to the modern computer.



**1897** J.J. Thomson discovers the electron, laying the foundations for the whole of modern physics, including electronics and computer technology. Inventors use his work to develop devices such as the telephone, radio and television.



**1934** Flight Lieutenant Frank Whittle is sent to Cambridge as a mature student by the RAF and is encouraged to pursue his innovative idea of jet propulsion, patented three years earlier but ignored by the Air Ministry.



**1953** Francis Crick and James Watson discover the structure of DNA, unlocking the secret of how coded information is contained in living cells and passed from one generation to the next. Their discovery opens the door to the study of an entirely new science – genetics.



## 800 years: transforming tomorrow – A brief history of the University

In the 13th, 14th and 15th centuries...

**Within a century of a handful of scholars arriving in the small fenland town of Cambridge, the Colleges were created: this medieval innovation allowed the University to grow as a national, then European, then international force.**

In **1209**, a group of scholars, seeking refuge from hostile townsmen in Oxford, congregated at Cambridge for the purpose of study. By **1226**, the scholars were numerous enough to set up an organisation, represented by an official called a Chancellor, and to arrange regular courses of study.

In **1284**, Hugh Balsham, Bishop of Ely, founded Peterhouse, the first College at Cambridge; over the succeeding centuries, another 30 Colleges would be founded. For instance, in **1441** Henry VI founded King's College, laying the first stone of the chapel in **1446**; and in **1546** Henry VIII founded Trinity College. The most recent College, Robinson, was founded in **1979**.

From the 14th century onwards, the University began to acquire property on the site today known as Senate House Hill and to build teaching rooms and other accommodation known as the 'Schools' – some of which survive today as the 'Old Schools'; the University's central offices of administration.

Right from the start, there was friction between townspeople and students, and these 'town versus gown' disputes were to continue until the 19th century.

In the 16th century...

**As the years passed, the University and Colleges acquired more land, power and independence, and their innovative teaching and learning began to attract scholars from all over England and Europe.**

In **1502**, the first endowed University teaching post, the Lady Margaret Professorship of Divinity, was established. Many scholars, such as Erasmus of Rotterdam, were attracted to the University and encouraged the 'new learning' in Greek and Hebrew.

In **1534**, a royal charter gave the University the power to license three stationers who were to print and publish works that it approved. This privilege eventually developed into the Cambridge University Press, the oldest academic publisher in the world, which printed its first book in 1584.

In **1536**, Henry VIII endowed five professorships, the Regius Professorships of Divinity, Hebrew, Greek, Physic and Civil Law, emphasising changes in teaching methods and setting an example for private donors.

In the 17th and 18th centuries...

**The University began to demonstrate the characteristics that were to make it one of Europe's leading places of learning: mathematics came to the fore, and its library and research collections became increasingly important.**



In **1661** Sir Isaac Newton (1643-1727) first attended Cambridge. Together with his followers, he pursued diverse scientific investigations and the University saw a rapid expansion in the number of professorships in mathematics and the sciences, many of them made possible through

private donors. Mathematics came to dominate studies and eventually 'the Tripos' came to mean the examination in mathematics.

The first of the 10 great collections and museums of the University were established: Dr Woodward's **1728** bequest of a collection of fossils formed the basis of what became at first the Woodwardian Museum and later the Sedgwick Museum of Earth Sciences, while in **1762** the University's first Botanic Garden was endowed by Richard Walker. The University Library also expanded, while the Senate House was finally completed in **1730**.

In the 19th century...

**The 19th century saw a period of great advancement for the University in an astonishing range of areas.**

An examination for the Bachelor of Laws in Civil Law first appeared in **1816**; a Classical Tripos began in **1824**; and in **1843** the first steps were taken towards a Theological Tripos.

The central administration of the University was strengthened and extended, but there was growing pressure for greater change. In **1847**, Prince Albert, the Prince Consort to Queen Victoria, was appointed Chancellor of the University and became an influential voice of reform. In **1850**, a Royal Commission was appointed to report on the two ancient universities of Oxford and Cambridge.

As a result of the Commission, in **1856** the Cambridge University Act was established, embodying the basic form of University governance that remains in place today. The Commission also heralded the introduction and examination of new studies: in **1851**, the Natural Sciences and Moral Sciences Triposes were approved; Triposes in law, history, theology, languages and mechanical sciences were in place before the end of the century.

In **1829**, the first boat race between Cambridge and Oxford took place and the first inter-university cricket match was contested – by **1939** they had become annual events. After **1851** organised sport became a well-established feature of undergraduate life.

In **1858**, the University of Cambridge Local Examinations Syndicate (now Cambridge Assessment) was established to administer exams for non-University students and to inspect schools, with the aim of raising standards in education. In **1869**, Emily Davies and others founded Girton College, the first residential university-level institution of higher learning for women.

In the sciences, William Cavendish endowed the University's new Cavendish Laboratory in **1870** for the study of experimental physics, while in the arts, Cambridge Footlights, now well-known as the launch pad for the careers of many actors, directors and comedians, was founded in **1883**.



### In the 20th century...

**The expansion of the University continued apace in the first half of the 20th century, with research frontiers constantly challenged and new ideas and innovations being introduced.**

Scientists at the University continued Cambridge's 19th century tradition of making major breakthroughs, and many were awarded Nobel Prizes. The Colleges and the University expanded to accommodate the rapidly increasing numbers of students; this included the development of the Downing Site

and the New Museums Site, and the foundation of Downing, Selwyn and St Edmund's Colleges.

Following the armistice in **1918**, the first Festival of Nine Lessons and Carols was held; it is now broadcast worldwide from King's College Chapel each Christmas Eve.

Postgraduate degrees were introduced in **1921**. In **1934**, the University Library moved to a new site across the River Cam; it has since become the largest open access library in Europe. Women finally gained full membership of the University in **1947**.

In the **1950s** and **1960s**, new areas of study developed, including veterinary medicine, and teaching and research facilities were again significantly expanded. Science and medicine continued to be a major focus: the building of the new Addenbrooke's Hospital provided the nucleus for a wide range of medically related departments. In the **1970s**, the Cavendish Laboratory moved to a spacious site in West Cambridge. In **1975**, Trinity College founded England's first science park on the outskirts of Cambridge. This was part of the impetus for the *Cambridge Phenomenon* – the successful growth of science-based industry, much of it deriving from University activities.

Such rapid expansion required extra resources and in **1989** the Cambridge Foundation was formed with the aim of raising £250 million over 10 years. In **1990**, the Royal Greenwich Observatory relocated to Cambridge, confirming the city among the world's leading centres for the study of astronomy and astrophysics. **1996** saw the opening of the new buildings for the Law Faculty and Judge Business School.

### The 21st century...

**The advances made at Cambridge continue to transform our understanding of today's world and our interventions in it, as the University contemplates its ambitions for the future.**

In **2000**, massive development began on a modern science and technology campus on the University's West Cambridge Site. On the Addenbrooke's Biomedical Campus, work started in **2003** on a state-of-the-art cancer research facility; this now houses the largest concentration of cancer researchers in Europe. The scale of these and other developments obviously demands intensive investment, and in **2005**, the University launched the Cambridge 800th Anniversary Campaign to raise £1 billion by **2012**.

In **2006**, the Registry of the University marked 500 years, one of the longest continuously held offices in UK higher education. In **2008**, Cambridge Assessment marked its 150th anniversary; appropriately it now offers qualifications in more than 150 countries. In **2009**, the University of Cambridge celebrated its 800th anniversary.

## Cambridge people

**Cambridge is its people and over the centuries many have contributed to advancing knowledge. To name but a few...**

- 1503** Thomas Cranmer, aged 14, enters the newly endowed Jesus College. He later becomes the first post-reformation Archbishop of Canterbury, arranging Henry VIII's divorces, and is largely responsible for the *Book of Common Prayer*.
- 1516** Desiderius Erasmus comes to Cambridge to work on his translation of the Greek New Testament and on textbooks that become the foundation of the 'new learning'.
- 1620** Francis Bacon pioneers the scientific method in his work *Novum Organum*.
- 1625** John Milton enters Christ's, where he studies until 1632. Five years later, on the death of his friend, Edward King, he writes *Lycidas*, recalling in pastoral terms their days together.
- 1627** John Harvard becomes an undergraduate at Emmanuel. He later emigrates to America and in 1636 bequeaths his library and half his estate to the University that now bears his name.
- 1661** Isaac Newton is admitted to Trinity College to study maths, optics, astronomy and physics. When the University closed due to the Great Plague, he returned home for two years and worked on the *Principia Mathematica*. Newton returned to Trinity in 1667 where he became a Fellow and was later appointed Lucasian Professor of Mathematics.
- 1711** Richard Bentley completes his edition of the Latin poet Horace. His editing and interpretation of classical texts inspire generations of classics scholars.
- 1784** The Rt Hon William Pitt is elected MP for the University at the age of 25, a year after becoming Prime Minister.
- 1805** Lord Byron enters Trinity and starts writing his early satires and poems.
- 1831** Charles Darwin is recommended by Professor John Stevens Henslow to join HMS Beagle as the naturalist on its scientific survey of South American coastlines. *On the Origin of Species*, his theory of natural selection, is published in 1859.
- 1895** Ernest Rutherford, the father of nuclear physics, begins postgraduate study at the Cavendish Laboratory, pioneering the Rutherford Model for subatomic structure.
- 1899** Lytton Strachey, Leonard Woolf and Thoby Stephen meet as undergraduates at Trinity and form the nucleus of what becomes the Bloomsbury Group.
- 1903** Bertrand Russell publishes *Principles of Mathematics*, the same year as G E Moore publishes his influential *Principia Ethica*. In 1913, Russell and A N Whitehead publish the even more influential *Principia Mathematica*. Four decades later, Russell collects his Nobel Prize for Literature.
- 1907** Jawaharlal Nehru, the first Prime Minister of India (1947–1964), enters Trinity.
- 1911** Ludwig Wittgenstein begins his studies at Trinity College, starting his work on the foundations of logic and mathematical logic.
- 1932** F R Leavis publishes *New Bearings in English Poetry*. His distinctive style of literary and cultural criticism influences generations of students in the 1930s, 1940s and 1950s.
- 1939** Dorothy Garrod becomes Disney Professor of Archaeology, the University's first woman professor. Her notable excavations at Mount Carmel cast new light on the origin of our own species, *Homo Sapiens*, and our links to Neanderthal man.
- 1954** Joseph Needham, already eminent in biochemistry, publishes the first volume of his *Science and Civilisation in China*, the start of a massive enterprise, vastly expanding our knowledge of China and its civilisation.
- 1955** Sylvia Plath, Marshall Scholar at Newnham, continues correspondence to her mother, later to be published in *Letters Home*.
- 1958** Vivian Fuchs and his team complete the first overland crossing of Antarctica.
- 1975** Rosemary Murray, President of New Hall, becomes the first female Vice-Chancellor of the University.
- 1979** Stephen Hawking becomes the Lucasian Professor of Mathematics and continues his pioneering research on singularities and black holes; in 1988 he publishes *A Brief History of Time*, one of the best-selling scientific books of all time.



**What does Cambridge Enterprise do?**

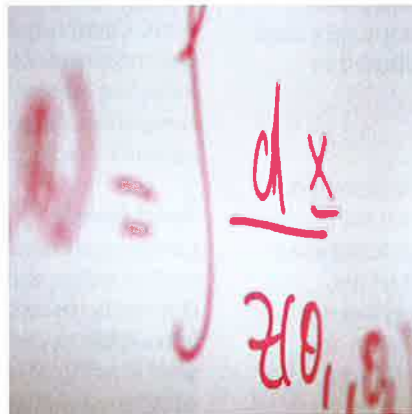
Cambridge Enterprise is a wholly owned subsidiary of the University. It assists in the commercialisation of University discoveries, provides access to early-stage funding, and supports staff wishing to perform external consulting work.

**Where does Cambridge Enterprise's funding come from and where does it go?**

Cambridge Enterprise funds its efforts through a share of income from licensing, consultancy and equity transactions as well as through support from the University, government and other sources. More than 85% of income is returned to the University and its researchers.

**Why is the University involved in commercialisation?**

One of the University's core values is to contribute to society through the dissemination and application of research. Engagement with commercial channels is needed to ensure that world-changing Cambridge discoveries can have the greatest impact on society.

**How does Cambridge Enterprise contribute to society?**

University of Cambridge research has a global impact across a variety of sectors. Cambridge research is advancing solar and wind power, developing new therapies for disease and removing barriers to personalised medicine.

**How does a focus on fundamental research and commercialisation work?**

Generating an impact from research requires the University to put certain mechanisms in place, such as intellectual property management, proof of concept funding, licensing and starting new ventures, to support promising ideas through to commercialisation.



### **Cambridge Enterprise**

Cambridge Enterprise Limited is a wholly owned subsidiary of the University, responsible for the commercialisation of Cambridge intellectual property. Cambridge Enterprise delivers its mandate through three overlapping business units: technology transfer services, consultancy services and seed fund services. Activities include management and licensing of patents, proof of concept funding and support for University staff and research groups wishing to undertake consultancy work.

Cambridge Enterprise provides access to angel and early stage capital through the Cambridge Enterprise Seed Funds and Cambridge Enterprise Venture Partners, and offers business planning, mentoring, and other related programmes. Over the past four years, income from licensing, consultancy and equity transactions exceeded £37 million, of which £30 million was distributed to University departments and academics.

### **Technology Transfer**

The Technology Transfer team works with researchers to manage and license their patentable inventions and other intellectual property. The team works to support academics starting from the earliest stages of the commercialisation process, from supporting funding applications, to supporting the market research and development of prototypes in order to find the best commercial partners.

Over the past three years, income from licensing has exceeded £23 million, 536 new technology disclosures were made and 315 patents were filed.

### **Consultancy**

Consultancy is an important and effective way for the University to disseminate its knowledge and expertise to government, industry and the public sector.

In consultancy, as opposed to collaborative research, University staff apply their personal expertise to help a client organisation solve problems that are specific to the client's business. The type of projects vary widely between expert witness appearances and tendered public contracts, while the broad scope of projects reflects the wide range of University research that is in demand by both industry and government.

The number of consultancy projects continues to grow rapidly, with a 92% increase in projects over the past four years. Client organisations include some of the largest and most respected companies in the UK and worldwide, including leading UK, US and European pharmaceutical companies, major petrochemical corporations and several Formula 1 racing teams.

### **Seed Funds**

Cambridge Enterprise invests intellectual property and cash to create successful new ventures based upon University research. PathFinder funding of up to £15,000 is available to carry out market and IP assessments; and seed funding of up to £250,000 is available to set up a new company, joint venture or partnership.

The Seed Fund team maintains links to venture capitalists, angel and early stage investors through Cambridge Enterprise Venture Partners. Currently, Cambridge Enterprise holds equity in more than 68 companies and manages evergreen seed funds on the University's behalf. Since 1995, the investee companies have raised more than £800 million in funding, representing a leverage of 75 times the University investment.

[www.enterprise.cam.ac.uk/](http://www.enterprise.cam.ac.uk/)



**Income and expenditure (excluding Press, CA & Trusts)**

	2013-14	2012-13
Income	£'000	£'000
HEFCE and NCTL grants	178,581	183,803
Research Grants and Contracts	371,148	331,795
Fee Income	207,546	182,739
Endowment and Investment Income (of which restricted)	69,701	62,131
(35,800)	144,901	144,901
Total income	962,316	905,369

	2013-14	2012-13
Expenditure by Activity	£'000	£'000
Academic Departments	281,479	263,625
Academic Services	43,066	41,479
Payments to Colleges	44,944	43,256
Research Grants and Contracts	317,584	282,530
Other Activities	52,727	47,142
Administration and Central Services	96,464	96,521
Premises	95,412	89,012
Interest payable	13,125	10,490
Total expenditure	944,806	874,055

	2013-14	2012-13
Expenditure by Category	£'000	£'000
Staff Costs	482,873	453,274
Other Operating Expenses	384,023	354,461
Depreciation	64,782	55,830
Interest payable	13,125	10,490
Total expenditure	944,806	874,055

	2013-14	2012-13
Breakdown of Research Grant Income	£'000	£'000
Research Councils	119,382	105,716
UK Based Charities	112,785	104,517
UK Government / Public Bodies	5,858	4,147
UK Industry	15,617	14,942
UK Health and Local Authorities	28,152	22,922
European Commission	51,975	41,863
Overseas	36,288	36,820
Other Sources	891	868
Total	371,148	331,795

	2013-14	2012-13
Breakdown of HEFCE/NCTL Income	£'000	£'000
Recurrent Grant T	34,432	45,327
Recurrent Grant OR	122,358	120,142
Museums, Galleries and Collections	1,956	1,956
Specific Grants	3,873	1,833
Deferred Capital Grants	15,932	14,447
NCTL Grant	30	98
Total	178,581	183,803

	2013-14	2012-13
Balance Sheet	£'000	£'000
Fixed tangible assets	1,105,745	1,050,053
Fixed asset investments	835,166	772,394
Endowment assets	1,106,385	1,059,458
Current assets	1,119,323	1,089,390
Current liabilities	(1,080,373)	(1,000,721)
Net current assets	38,950	88,669
Bond liabilities	(342,277)	(342,274)
Net assets	2,743,970	2,628,300
Deferred capital grants	540,372	524,094
Endowments	1,106,385	1,059,458
Reserves	1,097,213	1,044,748
Total funds	2,743,970	2,628,300

**TRAC expenditure (excluding Press, CA & Trusts)**

	2013-14	2012-13	2011-12
Teaching - publicly funded	15.5%	16.1%	16.7%
Teaching - non publicly funded	4.5%	5.0%	4.8%
Research - publicly funded	45.9%	44.0%	45.5%
Research - non publicly funded	24.3%	25.1%	23.4%
Other	9.8%	9.8%	9.6%

**Full Time Equivalent (FTE) student load, 2013-14**

	UG	PGT	PGR	Total
Arts and Humanities	2,582	59	701	3,342
Humanities and Social Sciences	2,606	1,004	1,429	5,039
Physical Sciences	2,403	250	979	3,632
Technology	1,639	567	772	2,978
Biological Sciences	2,000	4	593	2,598
Clinical Medicine	506	18	428	953
Others	0	0	301	279
Continuing Education	126	8	0	135
Total student FTE	11,864	1,910	5,203	18,977

	July 2014	July 2013	July 2012
Home/EU students	10,543	1,081	3,247
Overseas students	1,321	829	1,957
Total	11,864	1,910	5,203

**Headcount of staff**

	July 2014	July 2013	July 2012
Academic	1,649	1,616	1,586
Academic related	1,695	1,559	1,409
Contract Research	3,707	3,470	3,118
Technical	1,171	1,149	1,090
Clerical and Secretarial	1,680	1,601	1,535
Manual and Domestic	443	428	414
Total staff	10,345	9,823	9,162

**Graduate employment**

	2012-13	2011-12
Employment	1,527	1,537
Further Studies	889	1,010
Still seeking employment	77	103
Not available for employment	141	150
Total respondents	2,634	2,800

2,634 respondents represent 80% of the 3,322 total first degree graduates in 2012-13. 2,800 respondents represent 84% of the 3,334 total first degree graduates in 2011-12.

**University Composition fees (main rates for new full-time entrants only)**

	2015-16
Undergraduates	£
Home/EU	9,000
Overseas group 1	15,063
Overseas group 2	16,800
Overseas group 3	19,713
Overseas group 4	22,923
Overseas group 5	36,459

	2015-16
Postgraduates	£
Home/EU range from	7,035 - 44,960
Overseas range from	17,991 - 44,960

**Research Excellence Framework (REF), 2014**

4*	46.8%
3*	40.4%
2*	11.5%
1*	0.9%
Unclassified	0.3%
Grand point average (GPA):	3.33
2,088 FTE category A staff submitted	

**Infrastructure funding**

Research Capital Investment Funding RCIF2 (2011-15)	£M
UK Research partnership investment fund UKRPIF (2013-16)	45
	46

**Net assignable space, April 2014**

	m <sup>2</sup>
Arts and Humanities	18,739
Humanities and Social Sciences	27,709
Physical Sciences	71,706
Technology	47,187
Biological Sciences	72,688
Clinical Medicine	32,191
Administration and Central Services	33,777
Central Libraries	47,398
Other	23,736
Total	375,132

**Number of full-time students by college, 2013-14**

	UG (Masters)	PG (Masters)	PG (Doctorate)
Christ's	435	57	91
Churchill	493	73	160
Clare	486	64	130
Clare Hall	0	88	106
Corpus Christi	283	102	102
Darwin	0	182	291
Downing	446	53	110
Emmanuel	490	50	97
Fitzwilliam	448	88	116
Girton	499	81	96
Gonville and Caius	568	48	147
Homerton	579	342	95
Hughes Hall	95	276	169
Jesus	513	96	131
King's	400	44	146
Lucy Cavendish	120	88	75
Magdalene	366	37	79
Murray Edwards	360	39	66
Newham	382	102	102
Pembroke	443	56	119
Peterhouse	252	32	80
Queens'	497	147	161
Robinson	416	39	81
St Catharine's	480	45	87
St Edmund's	110	157	138
St John's	581	56	186
Selwyn	394	39	91
Sidney Sussex	363	49	88
Trinity	701	60	182
Trinity Hall	385	47	115
Wolfson	176	175	175
Total	11,761	2,773	3,806





# Cambridge *innovation* in numbers

## The Cambridge Cluster

There are currently...

# 1,500+

technology-based firms in the Cambridge cluster



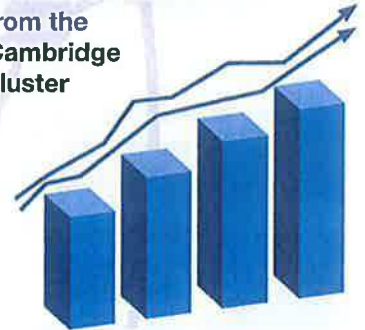
# 57,000+

people employed by the Cambridge cluster



# £13bn+

in total revenue from the Cambridge cluster



# 14\*

# \$1bn



companies have come from the Cambridge cluster

\* Abcam, ARM, Autonomy, AVEVA, blinkx, CAT, Chiroscience, CSR, Domino, Ionica, Marshall, Solexa, Virata, Xaar

# 2\*

# \$10bn



companies have come from the Cambridge cluster

\* ARM & Autonomy

# 26%

of people work in the knowledge intensive economy (compared to 12% nationally)



# 150+

physical science and engineering companies in the Cambridge cluster



# 150+

life science companies in the Cambridge cluster



# 330+

IT & telecoms companies in the Cambridge cluster



UNIVERSITY OF  
CAMBRIDGE

## The University

**9,500+**

people employed directly by the University



University expenditure of  
**£1,415m**



University income of  
**£1,438m**

**850+**

Total number of active IP licensing, consultancy and equity contracts managed by **Cambridge Enterprise** (the University's knowledge transfer office)

**18,500+**

students at the University of Cambridge



**90**

Cambridge affiliates have been awarded the Nobel Prize since 1904



**71%**

of staff deemed world leading or internationally excellent in research according to the 2008 Research Assessment Exercise (RAE), the highest of any university



## The Impact

**£1.3bn**

follow-on funding raised by University of Cambridge spin-outs in the Cambridge Enterprise portfolio



**97.4%**

...the 5-year survival rate of Cambridge Enterprise investments (compared to 44.6% nationally)



**1 in 6**

recent Cambridge leavers work or study in the Cambridge region



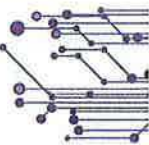
**300+**

high-tech ventures in the past 20 years of which University of Cambridge people & technology have been involved



**200+**

firms founded by Cambridge University Computer Lab alumni



**£250m+**

Current revenue of Cambridge cluster firms founded by Cambridge University Computer Lab alumni



**91%**

Cambridge recent leavers are in employment or full-time study, no matter the degree. A further 5% are travelling or not looking for work



Figures are based on information available at the time of printing – July 2014