

In 1386, Heidelberg University was founded by Rupert I on instruction of Pope Urban VI who demanded modelling it after the ancient University of Paris.

The University of Cambridge's founding followed the arrival of scholars who left the University of Oxford for Cambridge in 1209 after a dispute with local townspeople.

wiki

Christ's College



One of the University's 31 colleges

They are all independent and have their statutes approved by the King

They accommodate the students and teach them in small classes (typically of 2 students)

Each has a number of fellows, who teach for the college and mostly also hold university posts

Christ's College was first established as God's House in 1437.
It had to move because King Henry VI wanted the site to build King's College and was re-established in 1505.

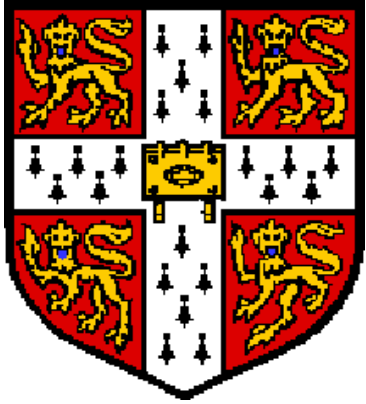


Christ's College's most famous student was Charles Darwin

His statue in the College is surrounded by plants he would have encountered on his botanical voyages on the ship HMS Beagle



Cambridge University



Scholars came from Oxford in 1209

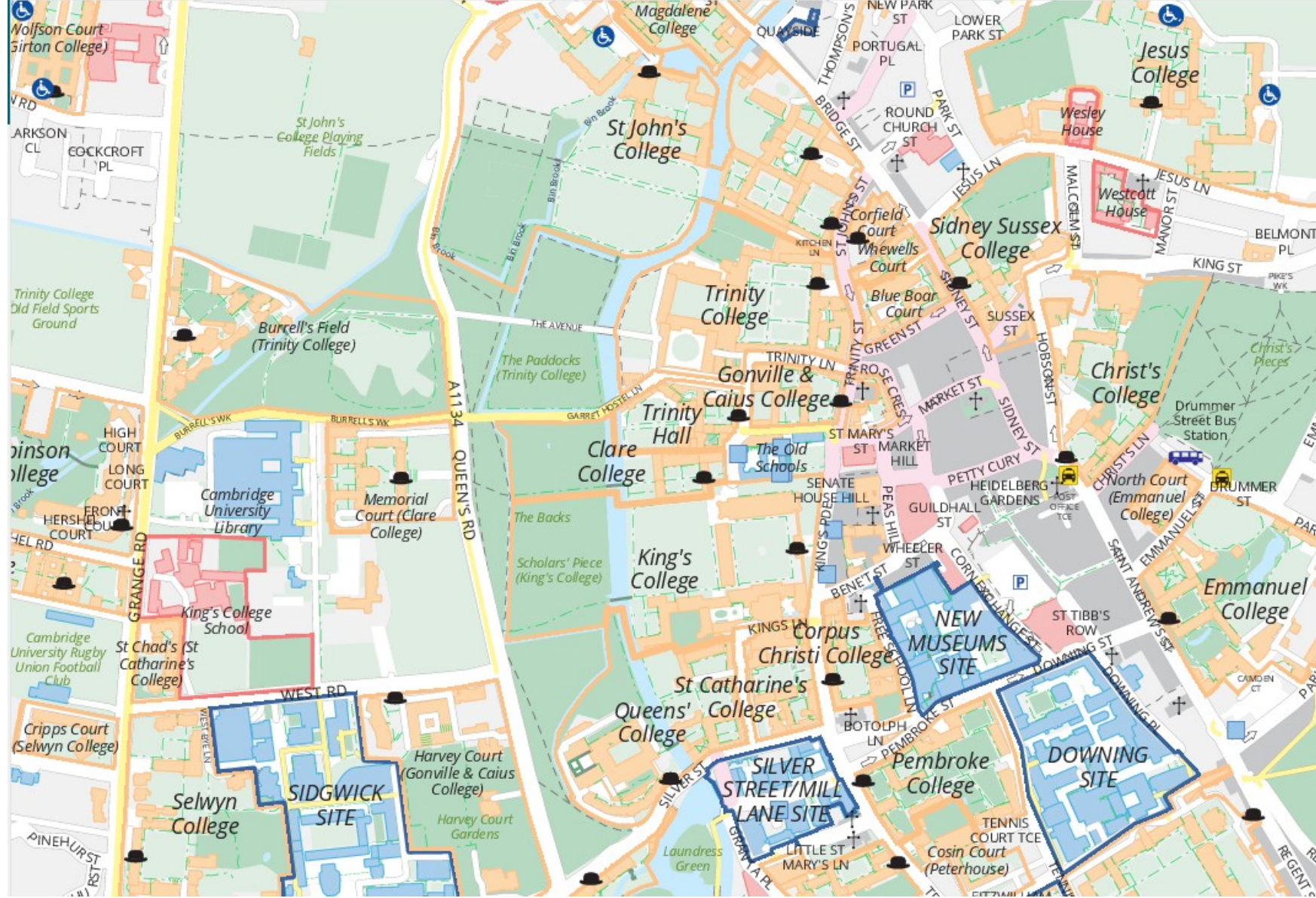
13000 undergraduates, 11000 graduate students

Its departments give lectures to students and do research




The University used to exercise power over the town.

Until 1893 it locked up women suspected to have a corrupting influence on the students

The University and the colleges are spread around the town, and beyond



QS world university rankings – the best two are in Cambridge

1		Massachusetts Institute of Technology (MIT) 📍 Cambridge, United States	100
2		University of Cambridge 📍 Cambridge, United Kingdom	99.2
3		University of Oxford 📍 Oxford, United Kingdom	98.9

Oxford-Cambridge boat race

Began in 1829 – 6.8km course on the River Thames

Number of wins: Cambridge, 86; Oxford, 81 (1 dead heat)

(wiki)

Nobel prizes

121 have been awarded to affiliates of the University, including 34 to Trinity College (Oxford only half as many)

34 in Physics, 27 in Medicine, 25 in Chemistry, 11 in Economics

Lord Rayleigh (1904)

Paul Dirac (1933)

Frederick Sanger (1958 and 1980)

Robert Edwards (2010)

Ernest Rutherford (1906)

John Cockcroft & Ernest Walton (1951)

Francis Crick & James Watson (1962)

Roger Penrose (2020)

Robert Edwards (1925 – 2013)

A physiologist who was a pioneer in in-vitro fertilisation (IVF) along with surgeon Patrick Steptoe, which led to the birth of Louise Brown on 25 July 1978.

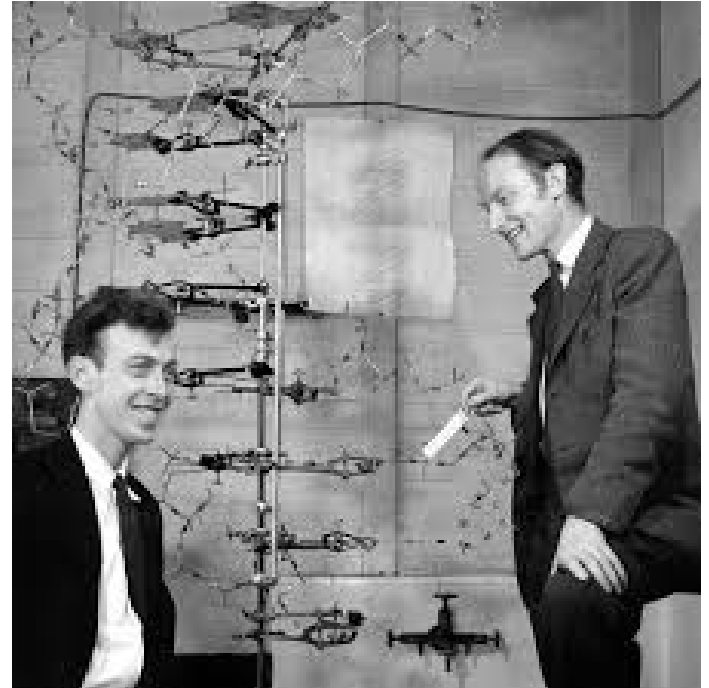
More than 390,000 IVF babies have been born in the UK alone.



Francis Crick and James Watson

Crick was a physicist who during WW2 worked on the development of mines. He then did research at the Cavendish Laboratory where with Watson (an American) he worked out the structure of DNA.

The Cavendish was close to the Eagle pub in Bene't Street, where they spent a lot of time and eventually announced their discovery.



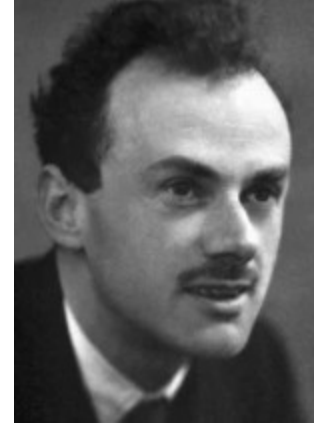
Paul Dirac

Won prize for understanding of quantum mechanics

In 1927 predicted existence of anti-matter

It took 60 years to have an application, in

PET scanners



City of Cambridge



Received its first charter in 1207

Population 150000

Surrounded by South Cambridgeshire with
160000

Said to be the driest city north of the
Pyrenees

Average annual rainfalls:

Cambridge 560 mm

Heidelberg 690 mm

A green City



The river Cam



Barges used to bring heavy goods to Cambridge, until the 17th Century when drainage works led to the construction of Denver Sluice 50km away, so cutting off a navigable route to the sea.

The colleges required the horses pulling the barges to walk along the middle of the river.

The first crossing was where Magdalene Bridge is now.
It was on the Roman road linking London to the north.

There used to be a ducking stool there.



Ducking stools (wiki)

If the "witch" floated it was deemed that she was in league with the devil

If she floated she was clearly guilty



The Market Square

Stalls have been trading at the historic market square in the city centre since the middle ages.

Great St. Mary's church was the first home of the University when scholars came from Oxford in 1209. Here lectures were given, degrees conferred and celebrations held.



Hinxton Genome Campus (15km from Cambridge)

Wellcome Sanger Institute – was part of the Human Genome Project

European Molecular Biology Lab – operates across six sites: Heidelberg, Barcelona, Hamburg, Grenoble, Rome and EBI Hinxton.

(Most of the world's DNA sequencing now is based on work in the University by Shankar Balasubramanian and Sir David Klenerman.)



Biomedical Campus (on the edge of the City)

Addenbrooke's Hospital, Cancer Research UK Cambridge Institute, Laboratory of Molecular Biology, AstraZeneca ...

By locating world-leading academic and industry scientists on the same site as the teaching hospitals of the University of Cambridge, it is creating the optimum environment for the rapid and effective translation of research into routine clinical practice.



Science Park (just outside the City)

Since it was established by Trinity College in 1970, the Cambridge Science Park has played a pivotal role in the “Cambridge Phenomenon” - the transformation of Cambridge from a market town with a world-class university to one of the leading technology hotspots in the world.

Today the 152-acre site is home to over 120 businesses ranging from spin-outs from the University of Cambridge to multinational companies.



ARM

(originally Advanced RISC Machines)

RISC= Reduced Instruction Set Computing

ARM designs chips, it does not make them.

Their chip is in nearly every mobile phone in the world

ARM is the largest of our 14 \$1bn companies

It was sold to the Japanese firm Softbank in summer 2016 for £23.4bn

Marshall of Cambridge



Family-owned firm, with its own airport just outside the City.

- Marshall Aerospace and Defence Group – maintains and converts aircraft
- Marshall Group Property – building 2500 homes and two schools on its site
- Marshall Fleet Solutions – refrigerated transport and other specialised vehicles

Some other companies with Cambridge bases:

Apple

Amazon

RAND Corporation

Microsoft

Samsung

Siemens

Nokia

Leica

Bayer Cropsience

Problems arising from economic success

Severe housing shortage

Highly congested roads

Poor public transport

Severe stress on health services

Deteriorating natural environment



House prices

Since 1967 the price of my house has increased by a factor 100

Inflation a factor 20

Average house prices in the City are 14 times average earnings
(only 5 times 20 years ago)

Some 65,000 people drive into Cambridge each day

EU Water Framework Directive

The quality of all waterbodies (rivers, lakes and estuaries) must reach 'good ecological status' as soon as possible (with an absolute deadline of 2027).

- Water quality decreasing due to diffuse urban and agricultural pollution and ageing sewerage.
- Declining river flows and over-abstraction of aquifers exacerbated by the planned increase in development and by increasing agriculture yields.
- Fish numbers have declined, due to droughts, floods washing fish downstream, overfishing and poaching.



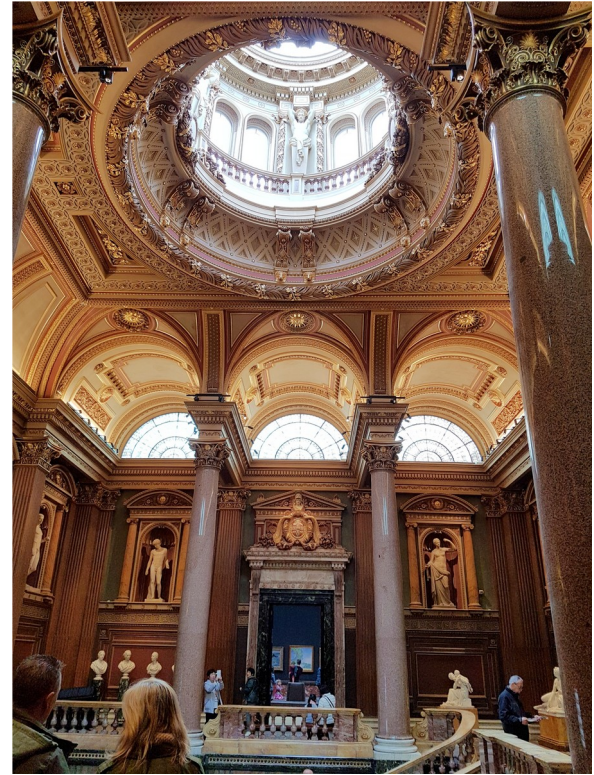
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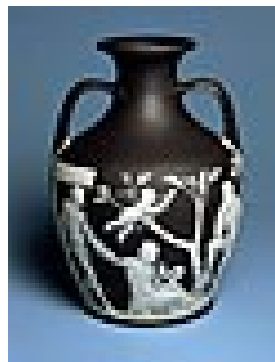
The Cambridge Rules were first played on Parker's Piece and had a "defining influence on the 1863 Football Association rules." which again were first played on Parker's Piece.



Fitzwilliam Museum

Housing over half a million objects, the Fitzwilliam has an amazing variety of beautiful artefacts and art from around the world. See everything from Egyptian coffins to Impressionist masterpieces; illuminated manuscripts to Renaissance sculpture; rare coins to Asian arts.





(and it has a good cafe)

Some other museums

Museum of Zoology Specimens and skeletons of fossils, animals, insects and birds from around the world

Museum of Archaeology and Anthropology Archaeological and anthropological artifacts and photographs from around the world

Museum of Classical Archaeology Plaster casts of classical Greek and Roman statues and sculpture

Polar Museum History and science of Arctic and Antarctic exploration

Sedgwick Museum Fossil animals and plants, dinosaurs, and rocks and minerals

Whipple Museum of the History of Science Scientific instruments, models and displays, dating from medieval times to the present day

University Botanic Garden

16 hectares, opened in 1846

Over 8,000 plant species from all around the world, including one of the region's finest collections of trees

(and it has a good cafe)



Round church

12th century -- now a visitor centre



Corpus clock

Donated by inventor and manufacturer of device that cuts the power to kettles when they boil

Rocking [grasshopper escapement mechanism](#) invented in the 1700s by John Harrison, who also invented the marine chronometer that enabled sailors to determine longitude.



Centre for Mathematical Sciences: completed 2002



Cambridge Mosque

Completed 2019 Cost £23m Won national architecture competition Very eco

