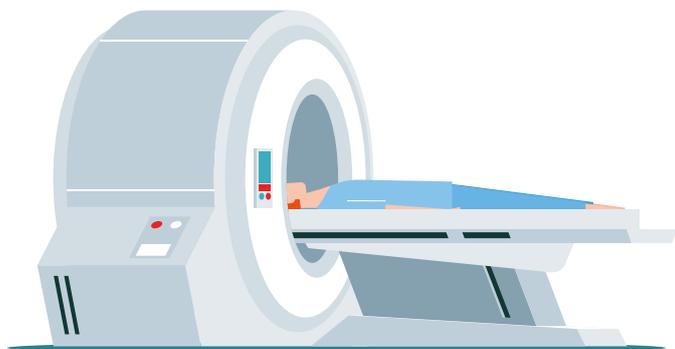




Thank you for coming to our imaging centre today and being part of the world's largest scanning project, from which results have already started to appear. Without your support, time and effort we would not be able to add these revolutionary data to the resource to benefit health research.



# 50,000!

## Exciting milestones

We are very proud to tell you that we have already scanned hearts, brains, bones, and blood vessels of 50,000 UK Biobank participants.

Scientists will use this information to understand how your genes and lifestyle affect the development of certain diseases like dementia, heart disease, and cancer.

We have also reached a major milestone of 3,500 health-related research papers using data from the UK Biobank resource.

Your contribution is enabling researchers to better understand how we might prevent and treat a wide range of diseases. The combination of imaging data, which provide information on our bodies such as brain function and fat around our organs,

combined with the other data we have already collected, such as genetic and cognitive function data, make this resource truly unique.

The Stockport, Reading and Newcastle sites are now fully open for research once again. Our centre in Bristol is currently helping ease pressures on the NHS.

## Research findings: Heart damage due to diabetes revealed for the first time

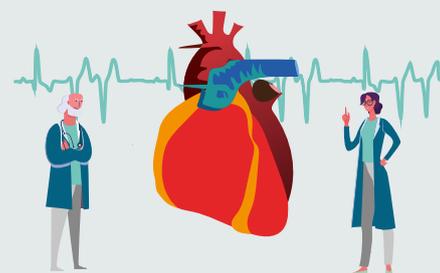
Adults with diabetes are up to three times more likely to develop heart and circulatory diseases, and are nearly twice as likely to die from heart disease or stroke as those without diabetes.

Across the UK, around 4.7 million people are living with diabetes and may develop further circulatory problems. Combined, these conditions cost the NHS a staggering £1.5 million per hour. Scientists at Queen Mary University of London studied about 4,000 MRI images of heart muscles from UK

Biobank to show that diabetes causes all four chambers of the heart to become smaller by roughly a teaspoon.

This is one of the earliest signs of heart disease and for the first time a study has shown the extent to which diabetes damages the heart muscle. These changes can be used to detect diabetes-related heart damage more efficiently. UK Biobank is the first study to demonstrate the extent, thus allowing action to be taken before the damage leads to serious heart problems.

This research is a great example of how the UK Biobank imaging project improves our understanding and treatment of serious diseases. The study was funded by the British Heart Foundation and published in the journal, "*Circulation Cardiovascular Imaging*".



# How are we making your visit COVID-19 secure?



-  We have **reduced the number of participants** who attend the site each day so that **social distancing** is easier to achieve.
-  Disposable masks are also available on site for anyone who requires them.
-  When our staff need to be close to you, to perform some of the tests or position you for imaging, they will wear **Personal Protective Equipment (PPE)**.
-  We have increased **frequency of cleaning** of both the centre environment and equipment.
-  **Additional sinks** have been installed around the centre and **alcohol hand gels** are readily available for use at any time by staff and participants.
-  Staff are **regularly testing** for COVID-19.
-  All refreshments are **sealed** and we use **disposable cups** for drinks.

## Prostate cancer risk can be reduced by managing hormones

In the UK, prostate cancer is the most common cancer in men as 129 men are diagnosed every day and one man dies from prostate cancer every 45 minutes. Factors such as older age, ethnicity and family history are already known to increase a man's risk of developing prostate cancer. But, for the first time a study using data from more than 200,000 men in the UK Biobank has shown that levels of 'free' testosterone and a growth hormone in their blood makes them more likely to be diagnosed with prostate cancer. These are factors that could be altered in an attempt to reduce risk.

The participants were cancer free at the beginning of the study. Researchers tested participant blood samples for testosterone and a growth hormone called insulin-like growth factor (IGF-I). They also looked for 'free' testosterone. All the men were followed up for six to seven years to see if they developed prostate cancer, and in that time there were 5,412 cases and 296 deaths from the disease. The researchers suggest that because the blood tests were taken some years before the prostate cancer developed, it is likely that the hormone levels are leading to the increased risk of prostate cancer, as opposed to the cancers leading to higher levels of the hormones.



Visit our website for more information: [www.ukbiobank.ac.uk/imaging-study](http://www.ukbiobank.ac.uk/imaging-study), log in to your portal to find out how to contribute further: [www.ukbiobank.ac.uk/members](http://www.ukbiobank.ac.uk/members), and follow us on Twitter for the latest updates: [@uk\\_biobank](https://twitter.com/uk_biobank).

First person scanned  
April 2014

We are here!

100,000

50,000

