

100,000 Genomes project is underway at CUH

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Professor Lucy Raymond, consultant at Cambridge University Hospitals, discusses Cambridge being chosen as the lead centre for the East of England, via the East of England Genomics Medicine Centre, for the 100,000 Genomes Project.

This national programme - the largest of its kind in the world - was launched by the Prime Minister in 2012 and will help provide better diagnosis and treatment tailored to individual illnesses for some patients. The Trust is taking part in the project as part of the East of England NHS Genomic Medicine Centre.



The project studies the molecular make-up of individuals through sequencing and analysing their genomes. This could lead to major breakthroughs in diagnosing and treating rare and

inherited diseases and common cancers. There are 20,000 genes in your genome, researchers will be looking at people's genomes to understand how genetic diseases occur.

The East of England NHS GMC will recruit 9,000 people as their portion of the national target - 6,000 for rare diseases and 3,000 for cancer. For patients affected by a rare disease the project also plans to read the genome of the parents or close relatives to help with making a diagnosis. Professor Lucy Raymond explains: "It's a privilege for Cambridge to be chosen to lead the East of England initiative. It's also an exciting opportunity to transform health care for the future."

As the lead for the East of England NHS Genomic Medicine Centre (EEGMC), Cambridge will be coordinating research to be carried out in Cambridge, Norfolk and Norwich, Leicester and Nottingham hospitals.

Professor Lucy Raymond added: "The intention is to provide a rapid diagnosis for all rare genetic diseases, facilitate improved treatments of these conditions and provide tailor made treatments for individuals with rare disease. The project also aims to improve cancer care by understanding the genetic changes that occur in cancers that point to new targets and new therapies for individual treatments."

To find out more about 100,000 Genomes Project, please refer to www.eastgenomics.org.uk and then talk to your hospital doctor or consultant to see how you can be involved in the study.