


Genomics

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A 3D rendering of a DNA double helix structure. The central helix is highlighted in a vibrant orange-red color, while the surrounding helices are in a muted blue-grey. The background is a soft, light blue gradient.

Developing people
for health and
healthcare

www.hee.nhs.uk

DISCLAIMER!

Background: Lunch and Learn

- Monthly sessions where staff/ HEE partners talk about current areas of work
- In January Dr Glenda Beaman (Greater Manchester Genomics Medicine Centre) delivered a session on Genomics – and talked about how HEE is helping prepare the current, and future workforce, for it



An introduction to Genomics...



The 100,000 Genomes Project

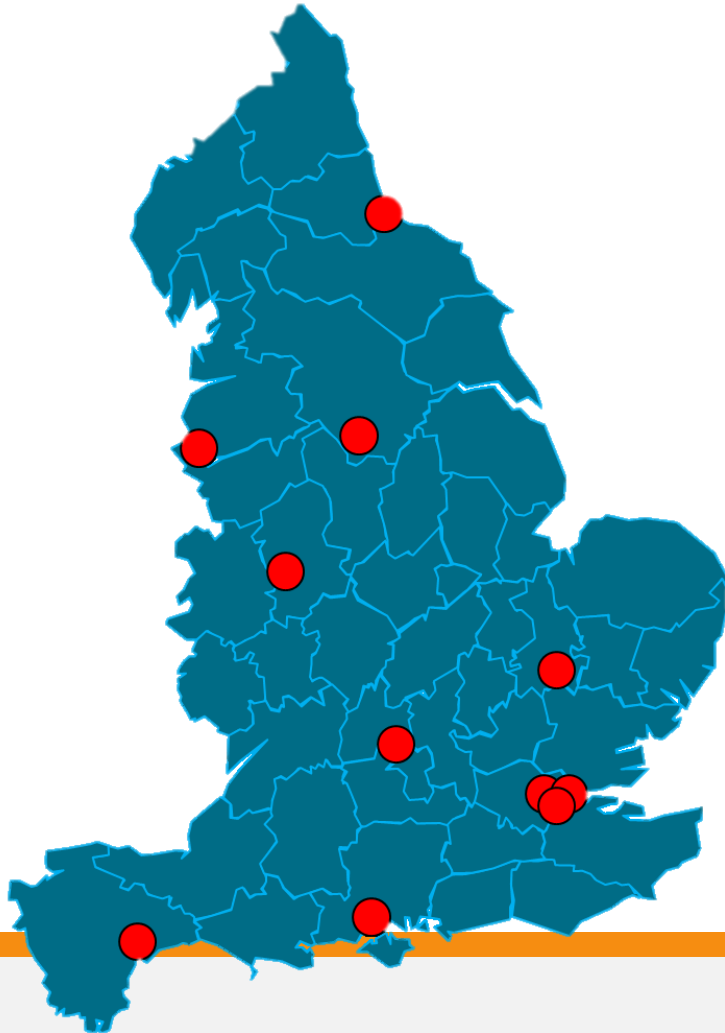
What is it?

- Launched by David Cameron in 2012
- Delivered by Genomics England, a company wholly owned and funded by the Department of Health
- They are going to sequence 100,000 whole Genomes
- Aim to transform healthcare to incorporate the use of genomics into mainstream medicine
- Focus on rare diseases
- <https://www.genomicsengland.co.uk/the-100000-genomes-project/>



Info taken from Dr Beaman's slides (2017)

Genomic Medical Centres - England



1. East of England NHS GMC
2. South London NHS GMC
3. North West Coast NHS GMC
4. Greater Manchester NHS GMC
5. University College London Partners NHS GMC
6. North East and North Cumbria NHS GMC
7. Oxford NHS GMC
8. South West Peninsula NHS GMC
9. Wessex NHS GMC.
10. Imperial College Health Partners NHS GMC.
11. West Midlands NHS GMC.
12. West of England NHS GMC
13. Yorkshire and Humberside NHS GMC

Info taken from Dr Beaman's slides (2017)

Why sequence?

- Diagnosis of a rare disorder
- Choosing the correct treatment
- Predicting how an individual with a disease may respond to a treatment
- Identifying new treatments or possibly even a cure
- Personalised Medicine – more tailored treatment

Educating the workforce



HEE's role is to prepare the current and future workforce for Genomics in everyday medicine

[Genomics Education Programme](#)

“The programme has been set up to ensure staff in the health and care system have the knowledge skills and experience to keep this country a world leader in genomic and precision medicine”

Whole Genome Sequencing MOOC

- Designed for anyone who wants to learn about whole genome sequencing, how it operates and the impact it is likely to have (starts with the basics)
- 22nd May – Free to join online (three weeks)
- <https://www.futurelearn.com/courses/whole-genome-sequencing>



Useful links

Genomics England

- <https://www.genomicsengland.co.uk/>

HEE Genomics Education Programme

- <https://www.genomicseducation.hee.nhs.uk/>

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