

HEE Genomics Education Programme: courses and resources

ONLINE COURSES

AVAILABLE NOW



COURSE: Whole Genome Sequencing: Decoding the Language of Life and Health

Target audience: All healthcare professionals

Summary: This mentored online course explores how whole genome sequencing works and its impact on healthcare, both in the UK and globally.

Available: 2x year (March, September); 9 hours, complete at own pace (FutureLearn)

► www.futurelearn.com/courses/whole-genome-sequencing



COURSE: 100,000 Genomes Project: Preparing for the Consent Conversation

Target audience: Clinical staff at NHS Genomic Medicine Centres

Summary: This course covers key steps of the project's consent process, how to prepare for the discussion, and address patients' concerns or questions. 2 CPD credits (RCP)

Available: Permanently; 1.5 hours, complete at own pace (e-Learning for Health)

► <https://portal.e-lfh.org.uk/Component/Details/465515>



COURSE: Introduction to Genomics

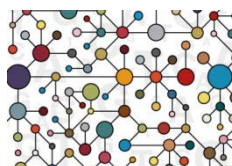
Target audience: All healthcare professionals

Summary: This course outlines how genomic information is being used to support clinical practice, and its future impact on healthcare.

Available: Permanently*; 1.5 hours, complete at own pace (GEP website)

► www.genomicseducation.hee.nhs.uk/courses/courses/introduction-to-genomics

* A new course to update and replace this course will be released in spring 2018 as part of our Genomics 101 series



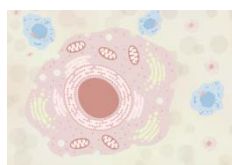
COURSE: Introduction to Bioinformatics

Target audience: Clinical scientists and interested healthcare professionals

Summary: This course outlines the principles and practices of bioinformatics, the challenges it faces, and the problems it can help to solve in healthcare.

Available: Permanently; 1.5 hours, complete at own pace (e-Learning for Health)

► <https://portal.e-lfh.org.uk/Component/Details/462387>



COURSE: Sample Processing and DNA Extraction

Target audience: Biomedical scientists and histopathologists

Summary: This video-based course covers key points of the protocol and best practice for processing blood and tumour samples for the 100,000 Genomes Project.

Available: Permanently; 1 hour, complete at own pace (e-Learning for Health)

► <https://portal.e-lfh.org.uk/Component/Details/462384>



COURSE: Tumour Assessment in the Genomics Era

Target audience: Histopathologists, and biomedical and clinical scientists

Summary: This series of modules has been developed to support NHS staff who are assessing FFPE tumour samples going forward for genomic testing.

Available: [Module 1 available now](#); rest to follow summer 2018 (Philips PathXL)

COMING SOON



COURSE: Genomics 101

Target audience: All healthcare professionals, students and educators

Summary: This collection of short courses provides a grounding in the science of genomics before delving in to the applications in healthcare.

Available: Summer 2018 (e-Learning for Health)

FILM AND ANIMATION

AVAILABLE NOW



FILMS: Genomics in Medical Specialties

Target audience: Clinical staff within each medical specialty (non-experts in genomics)

Summary: These films feature interviews with genomics 'champions', highlighting the impact of genomics in their specialty. Provided with useful supporting information.

Available: On our [website](#) (with supporting material), [Vimeo](#) and [YouTube](#)



FILMS: Genomics in Practice

Target audience: Staff within each professional group, and their colleagues

Summary: These films highlight how professions are being shaped by genomics, and the vital part staff play in delivering a genomic medicine service to patients.

Available: Nursing film now on [Vimeo](#) and [YouTube](#); midwifery film due autumn 2018

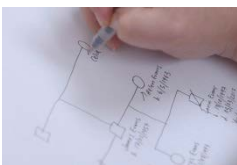


FILMS: Genomics Specialist Careers

Target audience: All health professionals

Summary: Ever wondered what a clinical bioinformatician does? Find out about this and other specialist roles in genetics and genomics in our new series of films.

Available: Bioinformaticians film now on [Vimeo](#) and [YouTube](#); genetic counsellors and clinical geneticists films due summer 2018



FILMS: Taking and Drawing a Family History

Target audience: Clinical staff and healthcare educators

Summary: Based on three patient scenarios, these films show the questions used to gather a family history, and demonstrate how the genetic pedigree is constructed.

Available: On [Vimeo](#) and [YouTube](#)



FILMS: Public Health Masterclass

Target audience: All healthcare professionals, especially public health professionals

Summary: This collection of films from HEE's Public Health Masterclass features full-length talks from genomics experts including Prof Tom Fowler and Prof Nick Loman.

Available: On [Vimeo](#) and [YouTube](#). Coming soon as a course with certification



ANIMATION: 'Are you ready?' GEP animation

Target audience: All healthcare professionals, students and educators

Summary: This short animation briefly outlines the impact of genomics on healthcare, and the broad range of education and training opportunities offered by the GEP.

Available: On [Vimeo](#) and [YouTube](#)



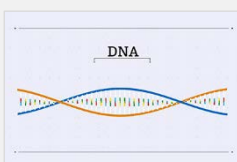
ANIMATIONS: Genomics Fun Facts

Target audience: All healthcare professionals, students and educators

Summary: These short animations highlight key facts around genomics, and offer a fun and engaging way to spark a conversation about genomics in healthcare.

Available: On [Vimeo](#) and [YouTube](#)

COMING SOON



ANIMATIONS: Genomics 101 animations

Target audience: All healthcare professionals, students and educators

Summary: These introductory animations provide accessible explanations of a number of key concepts, including DNA, genes, meiosis, mitosis and genetic inheritance.

Available: Spring 2018 on [Vimeo](#) and [YouTube](#)

FACTSHEETS AND CLINICAL TOOLS

AVAILABLE NOW



PDFs: Genetic Conditions factsheets

Target audience: GPs and other health professionals

Summary: Key facts of rare, inherited conditions (based on 100,000 Genomes Project's additional findings), with clinical features, diagnosis, management and treatment.

Available: On our [website](#)



PDFs: Genomics in Mainstream Medicine factsheets

Target audience: Clinical staff within each medical specialty

Summary: The Genomics in Mainstream Medicine Working Group produced a series of factsheets outlining the context and impact of genomics on key clinical specialisms.

Available: On our [website](#)



PDFs: 100,000 Genomes Project Eligibility Wheels

Target audience: Clinical staff at NHS Genomic Medicine Centres and delivery partners

Summary: A series of easy reference tools to identify potential participants eligible to take part in the 100,000 Genomes Project

Available: On our [website](#)



TEMPLATE: Family History Drawing Tool

Target audience: Clinical staff

Summary: This lightweight tool acts as a handy reminder for healthcare staff of the key steps and symbols used when taking and drawing a genetic pedigree.

Available: On request, via [email](#)

COMING SOON



PDF: 100,000 Genomes Project: Feedback of Results – Guide for Clinicians

Target audience: Clinical staff at NHS Genomic Medicine Centres and delivery partners

Summary: This guide is designed to support clinical staff who recruited participants to the 100,000 Genomes Project and are now feeding back results in the genomic report.

Available: Summer 2018

EDUCATIONAL GAMES

AVAILABLE NOW



BOARD GAME: Genomics Game

Target audience: Nursing associates and nurses with little/no prior genomics knowledge

Summary: This board game was developed to start the discussion about genomics in an engaging and non-threatening manner, reinforce knowledge and increase retention.

Available: On request, via our [website](#)

COMING SOON



BOARD GAME: Genomics Game: Midwives Edition

Target audience: Pre- and post-registration midwives

Summary: This new edition of our popular Genomics Game is designed to raise awareness about genomics within midwifery practice and healthcare as a whole.

Available: Autumn 2018



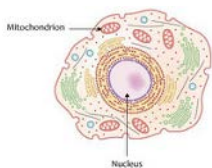
CARD GAME: Dr Jargon: Genomics Edition

Target audience: Health professionals familiar with genetics and genomics

Summary: Dr Jargon is a quickfire game that challenges players to describe genetics and genomics terms using simpler language – useful when talking to colleagues or patients.

Available: Autumn 2018

ADDITIONAL RESOURCES



IMAGES: Flickr channel

Target audience: All healthcare professionals, students and educators

Summary: A collection of genetic and genomic diagrams and infographics, available to download and use in teaching sessions and presentations (with attribution).

► <https://www.flickr.com/photos/genomicseducation/with/13080952404/>



VIDEOS: YouTube and Vimeo

Target audience: All healthcare professionals, students and educators

Summary: Our collection of films and animations spans a broad range of genetics and genomics topics, and is available to be shared and embedded (with attribution).

► [Vimeo](#) | [YouTube](#)



ARTICLES: Genomics Education Programme blog

Target audience: All healthcare professionals, students and educators

Summary: The GEP blog features regular articles on a range of topics, with particular emphasis on how new developments in genomics are relevant to NHS staff.

► <https://www.genomicseducation.hee.nhs.uk/news/>



SOCIAL MEDIA: Twitter, Facebook and LinkedIn

Target audience: All healthcare professionals, students and educators

Summary: The GEP shares its latest news and resources every day on social media, as well as highlighting useful links and initiatives elsewhere. Make sure you're following!

► [Twitter](#) | [Facebook](#) | [LinkedIn](#)