



Certificate of Achievement

Fridah Glelis Kariuki

has completed the following course:

BACTERIAL GENOMES: FROM DNA TO PROTEIN FUNCTION USING BIOINFORMATICS **WELLCOME GENOME CAMPUS ADVANCED COURSES AND SCIENTIFIC CONFERENCES**

This online course enabled learners to use bioinformatics - online computational tools - to probe genomes, to explore and represent DNA and protein sequences; and enabled learners to use publicly available databases to find protein sequences' conserved domains and investigate their functions.

The Royal College of Pathologists (RCPATH) has accredited this course for 10 Continuing Professional Development credits. This applies to medical staff and clinical scientists in career grade posts who are enrolled with one of the Royal Colleges for CPD purposes.



Dr. Rebecca Twells
Head of

Wellcome Genome Campus Advanced Courses and
Scientific Conferences



Professor Nicholas Thomson

Group Leader, Bacterial Genomics and Evolution
Wellcome Sanger Institute, Wellcome Genome Campus

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COURSES+
SCIENTIFIC
CONFERENCES

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The person named on this certificate has completed the activities in the attached transcript. For more information about Certificates of Achievement and the effort required to become eligible, visit futurelearn.com/proof-of-learning/certificate-of-achievement.

This learner has not verified their identity. The certificate and transcript do not imply the award of credit or the conferment of a qualification from Wellcome Genome Campus Advanced Courses and Scientific Conferences.



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BACTERIAL GENOMES: FROM DNA TO PROTEIN FUNCTION USING BIOINFORMATICS

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This online course covered the fundamentals of microbial bioinformatics: introduced learners to DNA and protein sequences and how to represent them for use in bioinformatics analysis; completed similarity searches and used similarities to explore potential functions of a previously unknown sequence; used protein databases to find conserved protein domains within a protein sequence - a key step in investigating potential protein function and in studying the determinants of virulence in microbes.

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STUDY REQUIREMENT

2 weeks, 5 hours per week

LEARNING OUTCOMES

- assess DNA representations and protein sequences
- perform searches in primary databases (repositories) and retrieve gene/protein data
- interpret different repository submission formats
- investigate biological databases for research
- identify the putative function of proteins based on their conserved domains

SYLLABUS

- Bioinformatics tools, DNA and protein sequences
- Retrieving DNA and protein sequences from repositories
- Databases for protein annotation
- Inferring function from sequence

ACCREDITATION

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