



Certificate of Achievement

Lokendra Sharma

has completed the following course:

BACTERIAL GENOMES: COMPARATIVE GENOMICS USING ARTEMIS COMPARISON TOOL (ACT) WELLCOME GENOME CAMPUS ADVANCED COURSES AND SCIENTIFIC CONFERENCES

This course covered: advantages of comparative genomic, use of basic tools of Artemis Comparison Tool (ACT) software, interpretation of results from already generated comparison files, production of new comparisons and analyses of results, and development of hypothesis based on results observation.

3 weeks, 5 hours per week



Dr Rebecca Twells

Head of Advanced Courses and Scientific Conferences
Wellcome Genome Campus Advanced Courses and
Scientific Conferences, Cambridge, UK



Professor Nicholas Thomson

Group Leader, Thomson Group, Wellcome Sanger
Institute
Wellcome Genome Campus, Cambridge, UK

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SCIENCE
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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 certificate represents proof of learning. It is not a formal qualification, degree, or part of a degree.

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86%
 AVERAGE TEST
 SCORE

This course involved the comparison of bacterial genomes using bioinformatics, the exploration of bacterial genomes differences and similarities, the drawing of conclusions from this, expanding knowledge about bacterial genomes, and the use of the software called Artemis Comparison Tool (ACT), which is based on Artemis

medical staff and clinical scientists in career grade posts who are enrolled with one of the Royal Colleges for CPD purposes

STUDY REQUIREMENT

3 weeks, 5 hours per week

LEARNING OUTCOMES

- Explain the advantages of comparative genomics
- Explore basic tools of the Artemis Comparison Tool (ACT)
- Interpret results from already generated comparison files
- Produce new comparisons and analyse results
- Develop hypothesis based on results observation

SYLLABUS

Week 1

- * Introduction to comparative genomics
- * Introduction to ACT

Week 2

- * Analyse available data
- * Generate your own comparison files
- * Make your own comparisons in ACT

Week 3

- * Identify pseudogenes in *Mycobacterium leprae* using ACT
- * Peer review project: Comparative genomics on two clinically relevant plasmids from *Shigella*

ACCREDITATION

The Royal College of Pathologists (RCPATH) has accredited this course for 15 Continuing Professional Development credits. This applies to