UNIVERSITY OF WESTMINSTER

Microbial Genomics Workshop 25 April

Get hands-on practical experience on next-generation sequencing (NGS) and their applications in clinical microbiology during this one-day workshop in London at University of Westminster on 25th April 2019. Learn step-by-step how to easily and effectively analyze and manage NGS data generated by modern sequencing technologies.

- ❑ Introduction to NGS and their applications in clinical microbiology (LECTURE)
- ❑ Working with NGS data: Raw sequence data and quality control (COMPUTER LAB)
- ❑ Outbreak investigation using NGS (LECTURE)
- ❑ NGS reads alignment and mapping (COMPUTER LAB)
- ❑ *De novo* assembly: From raw reads to whole genome (LECTURE & COMPUTER LAB)
- ❑ From assembled genomes to:
  detection of antibiotic resistance in bacteria,
  monitoring resistance in HIV and HBV
  detection of virulence genes
  detection of mobile genetic elements (MGEs) such as plasmids, bacteriophages, etc.

The course is aimed at those with an interest in the applications of next generation sequencing technologies in diagnostic microbiology. Cost £160 including lunch & refreshments

For any questions, please contact Dr Manal Mohammed via m.mohammed@westminster.ac.uk

Learning outcomes, By the end of the short course you should be able to:
Understand NGS and its applications in clinical microbiology
Work with NGS data: Raw sequence data and quality control
Interpret outbreak investigation using NGS
Carry out NGS reads alignment and mapping
De novo assembly: From raw reads to whole genome