Learning Objectives

After this lecture you should be able to:

- Explain the basic principles of Illumina sequencing
  - Bridge amplification and cluster formation
  - Reversible dye-terminator sequencing

- Explain the problem of genome assembly
  - Short read assembly
  - How can long reads help?

- Describe applications of DNA sequencing to the analysis of bacterial pathogens
  - Epidemiology
  - Evolution
  - Functional adaptation