|  |  |  |  |
| --- | --- | --- | --- |
| Time | Wed | Thu | Fri |
| 9.00  10.30 | **Practical:** Introduction to Linux/Unix | **Practical:** Mapping (reference-based)  Local vs global  Mapping to Panel vs Single Reference  Identifications of Mixed-infection | **Lecture:** Introduction to Variant Calling  Practical: Variant Calling  Consensus Calling |
| 11.00  12.30 | **Lecture:** Introduction to Illumina Sequencing  **Lecture:** Introduction to NGS File format | **Practical:** Mapping – continued  Testing multiple tools for mapping | **Practical:** Detection of Resistance and minority variants |
| 1.30  3.45 | **Practical:** Quality Control and visualization of NGS Data  **Lecture:** Introduction to Mapping | **Practical:** Conversion to BAM, sorting and mpileup  Mapping Stats  Bam Visualisation  Duplicate removal | **Lecture:** Introduction to Denovo Assembly  **Practical:** Denovo Assembly  **Lecture:** Introduction to RNAseq and metagenomics |
| 4.00-  5.00 | Q&A | Q&A | Q&A |