

1. Identificação do Curso:

Pathogen Multiomics and Bioinformatics

2. Plano de Estudos

2.1. Programa:

1. *Introduction to NGS data and Quality Control;*
2. *Reference Assembly (mapping): mapping, data visualization, variant calling and functional annotation;*
3. *De novo genome Assembly: concepts and optimization, contig ordering and scaffolding, annotation;*
4. *Introduction to Phylogenetics and Phylodynamics;*
5. *Pathogen profiling toolbox: from NGS to phenotype;*
6. *Transcriptomics and RNA-Seq;*
7. *Introduction to Microbiome Analysis and Metagenomics;*
8. *Genome-Wide Association Studies (GWAS).*

2.2. Nº total de horas: 22,5

2.3. Horário: Diário, 9:30-18:00.

2.4. Número de ECTS (se aplicável): 3/6 (mediante realização de dois relatórios)