

## GMI12 NGS workshop program

### Day 1 – 10<sup>th</sup> June 2019 (Monday)

Time	Day 1	Responsible
9:00-9:30	<i>“An Introduction to Next Generation Sequencing (NGS) (include “The basic’s and potentials about NGS from a technological point of view”)”</i>	DTU
9:30-10:00	<i>QC sequencing data – FASTQC</i>	DTU
10:00-10:15	<i>Introduction to CGE tools</i>	DTU
10:15-11:00	<i>KmerFinder for species identification MLST typing using CGE tools</i>	DTU
11:00-11:15	<i>Coffee Break</i>	
11:15-12:45	<i>Identification of resistance genes (ResFinder), Plasmid replicons (PlasmidFinder) and pMLST</i>	DTU
12:45-13:45	<i>Lunch</i>	
13:45-15:15	<i>Introduction to SNP Analysis SNP tree construction using CSI Phylogeny</i>	DTU
15:15-16:15	<i>Tree Visualizer (FigTree and iTol)</i>	DTU
16:45-17:00	<i>Coffee Break</i>	
17:00-17:45	<i>Make your own database using MyDbFinder</i>	DTU
17:45-18:15	<i>A Bacterial Analysis Platform: An Integrated System for Analysing Bacterial Whole Genome Sequencing Data for Clinical Diagnostics and Surveillance</i>	DTU
	END OF DAY 1	

### Day 2 – 11<sup>th</sup> June 2019 (Tuesday)

Time	Day 2	Responsible
09:00-9:30	<i>Introduction to NCBI Website including Sequence data download from Genbank and NCBI BLAST</i>	FDA
9:30-11:00	<i>Tutorial: Pathogen Detection Website and Hands on Exercises</i>	FDA
11:00-11:15	<i>Coffee Break</i>	
11:15-12:15	<i>Tutorial: GalaxyTrakr</i>	FDA
12:15-13:15	<i>Lunch</i>	
13:15-14:00	<i>Hands on Exercises</i>	FDA
14:00-14:30	<i>Introduction on Metagenomic Analyses</i>	FDA
14:30-15:00	<i>The Future of NGS in Food Safety and the Importance of a One Health Approach</i>	FDA
15:00-15:15	<i>Coffee Break</i>	
15:15-16:00	<i>An Introduction to Metagenomics – background and applications</i>	DTU
16:00-17:00	<i>OpenEBench, a tool for validating and benchmarking whole sequencing pipelines</i>	BU-ISCIll
17:00-17:15	<i>Closing and participants reviews</i>	
	END OF DAY 2	

DTU: Tech. University of Denmark, WHO Collaborating Centre for antimicrobial resistance  
 FDA: US Food and Drug Administration  
 BU-ISCIll: Bioinformatics Unit, Instituto de Salud Carlos III