
 wellcome connecting science		Antimicrobial Resistance in Bacterial Pathogens 09 - 14 March 2024, Nitiolal Centre for Communicable Diseases, South Africa					 NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES <small>Division of the National Health Laboratory Service</small>												
PRECOURSE ON LMS - Bioinformatics 1: Introduction to Linux (5 hours)	Time	Saturday, 9 March	Sunday 10 March	Monday 11 March	Tuesday 12 March	Wednesday 13 March	Thursday 14 March	Time											
		Transfer: 08:15	Transfer: 07:45	Transfer: 07:45	Transfer: 07:45	Transfer: 07:45	Transfer: 07:45												
	08:30 - 08:45		Study Design & Surveillance Methods	AST Part II	Acquisition & Evolution of Resistance: Background, Causes & Biological Mechanisms	Group Project Presentations	Group Project Presentations	08:30 - 09:00											
	08:45 - 09:00																		
	09:00 - 09:15	Registration	Epidemiology of AMR & National Surveillance Programmes in Africa	QA, QC & Quality Management in AST Testing	Detecting resistance using command line	Introduction to Genomic Surveillance of AMR	Local AMR Epidemiology - Investigation Transmission of Clones & AMR Using Genomics	09:00 - 09:30											
	09:15 - 09:30																		
	09:30 - 09:45	Welcome and Introductions	AST Part I	Break	Break	Break	Break	09:30 - 10:00											
	09:45 - 10:00																		
	10:00 - 10:15		Break					10:00 - 10:30											
	10:15 - 10:30																		
	10:30 - 10:45	Break	AST Part 1 (cont)	Break	Break	Break	Break	10:30 - 11:00											
	10:45 - 11:00																		
	11:00 - 11:15	Advanced Learning & Traning						11:00 - 11:30											
	11:15 - 11:30																		
	11:30 - 11:45	Nanopore Sequencing	cont...	Analysing Phylogenetics	cont...	cont...	11:30 - 12:00												
	11:45 - 12:00																		
	12:00 - 12:15						Brief Introduction to sequencing technologies					12:00 - 12:30							
	12:15 - 12:30																		
	12:30 - 12:45	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	12:30 - 13:00											
	12:45 - 13:00																		
	13:00 - 13:15							13:00 - 13:30											
	13:15 - 13:30																		
	13:30 - 13:45	Introduction to AMR: Historical & Epidemiological Aspects	Lunch	Lunch	Lunch	Lunch	Lunch	13:30 - 14:00											
	13:45 - 14:00																		
	14:00 - 14:15		Illumina Sequencing	Assembly (Short Read)	Intro to Metagenomics	cont...	Epi Collect; Genomics Study Designs, Genomic Surveillance in Africa	14:00 - 14:30											
	14:15 - 14:30																		
	14:30 - 14:45	Clinical Importance of AMR						14:30 - 15:00											
	14:45 - 15:00																		
	15:00 - 15:15	Assembly (Long Read)	Metagenomics: QC, Meta Assembly, Classification & Quantification	Break	Break	ALT 2 & Wrap-up	15:00 - 15:30												
	15:15 - 15:30																		
	15:30 - 15:45						Break						15:30 - 16:00						
	15:45 - 16:00																		
	16:00 - 16:15	Briefing to EpiCollect	Break	Break	Metagenomics - AMR Prediction	AMR & One Health	Bus to Hotel	16:00 - 16:30											
	16:15 - 16:30																		
	16:30 - 16:45		Intro to UNIX/Command Line	Alignment & Variant Calling		Group Project: Detecting Resistance & Metagenomics		16:30 - 17:00											
	16:45 - 17:00																		
	17:00 - 17:15	EpiCollect: Fieldwork				Group Project: Phylogenetics		17:00 - 17:30											
	17:15 - 17:30																		
	17:30 - 17:45	Accessing Data & QC						17:30 - 18:00											
	17:45 - 18:00																		
	18:00 - 18:15							Networking						18:00 - 18:30					
	18:15 - 18:30																		
	18:30	Bus to Hotel	Bus to Hotel	Bus to Hotel	Bus to Hotel	Bus to Hotel	18:30												
	19:00						19:00												
		Saturday, 9 March	Sunday 10 March	Monday 11 March	Tuesday 12 March	Wednesday 13 March	Thursday 14 March												
	Lectures																		
	Lab Practicals																		
	Computational Practica																		
	In-lab Talks																		
	Group Projects																		
	Breaks																		