

Programme

Introduction to Bioinformatics using the eBioKit Platform

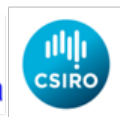
Commission for Biotechnology & Genetic Engineering, National Center for Research

November 24 - 28, 2014

Time	Activity	Trainers/resource person
DAY 1: MONDAY, 24 NOVEMBER		
0900-0920	<i>Arrival and Registration</i>	MARI and Nairobi team
	<i>Welcome and Opening Session</i>	
0920-0955	Welcoming Address	Capacity building Team leader MARI Prof. Erik Bongcam
0955-10:00	Participant introduction and expectations	
1000-1030	Tea / coffee break	
1030 - 1230	First Session: Introduction to Bioinformatics and the eBioKit	Erik
1230 - 1400	Lunch	
1400 - 1430	Second Working Session: Bioinformatics Resources for Data Management (Biological databases) and BLAST	Erik
1430-1600	Tutorial/Demo: Database searching using BLAST on the eBioKit	Dedan Githae
1600 - 1630	Tea/coffee break	
1630-1500	Tutorial/Demo cont'd: Database searching using BLAST on the eBioKit	Dedan Githae



Time	Activity	Trainers/resource person
DAY 2: TUESDAY, 25 NOVEMBER		
0900-1000	First Session: Overview of miRNAs	Artemis
1000-1100	Lecture: microRNA gene prediction	Artemis
1100-1130	Tea/coffee break	
1130-1230	Hands-on session: microRNA target prediction	Artemis
1230-1400	Lunch	
1400-1530	Demo and Hands-on: Bioinformatic Analysis and Discovery of miRNA, microRNA target prediction	Artemis
1530-1600	Tea/coffee break	
1600-1700	Second working session: Lecture and Hands-on Introduction to the EMBOSS package (command line or wEMBOSS) -Nucleotide and Protein sequences Analysis	Erik
DAY 3: WEDNESDAY, 26 NOVEMBER		
0900-1000	First Session: Introduction to LINUX operating system	Dedan Githae
1000-1030	Tea/Coffee	
1030-1130	Hands on session: LINUX	Dedan Githae



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1130-1230	Second working session: Lecture and Hands-on Introduction to Restriction enzymes and PCR Primers	Artemis
1230-1400	Lunch	
1400-1530	Hands on: Restriction enzyme analysis and PCR Primer Design	Githae Dedan
1530-1600	Tea/coffee break	
1600-1630	General Discussion and closing	
DAY 4: THURSDAY, 27 NOVEMBER		
0900-1000	First Session: Introduction to NGS technologies	Etienne
1000-1130	First session: Hands on NGS analysis using the EBioKit analysis suite	Etienne
1100-1130	Tea/coffee break	
1130-1330	Second working session UGENE: GUI based bioinformatics software for Desktop environment visualization of NGS data	Etienne
1330-1400	Lunch	
1400-1600	Second working session Wind up on NGS analysis	Etienne/All other trainers
1600-1630	Tea/coffee break	



Time	Activity	Trainers/resource person
1630-1700	General Discussion and closing	
DAY 5: FRIDAY, 28 NOVEMBER		
0900-1030	First session: Lecture and Hands on Multiple sequence Alignments and Phylogenetics	Etienne
1030-1100	Tea/Coffee break	
1100-1230	Hands on session: Multiple sequence Alignments and Phylogeny	Etienne
1230-1400	Lunch	
1400-1500	Distribution of Certificates and Closing Remarks	Dr. Fred Tairo/Charles Kayuki (MARI)