

NGS_21_QC_Data_Formats

Quiz template

Add questions, at least two answer alternatives and choose correct answers (at least one). Have fun creating your awesome quiz!
See an example question below (don't forget to overwrite this with your first question!)

Question	Answer 1	Answer 2	Answer 3	Answer 4	Correct answer(s) - choose at least one
1 Raw read sequence information is stored in:	BAM format	FASTA format	VCF format	FASTQ format	4
2 Quality scores are included in the raw read sequencer As values from 1- 30		As a measure of the quality of	As ASCII encoded values	As alphabet characters	2 & 3
3 A Phred quality score of Q30 is considered good b Q30 is the highest quality score		Q30 is equivalent to s 99.9%	ccError probabilities are equal to t	It is equal to a 0.1% error rate	2&4
4 The following CIGAR string 1M2I4M1D3M corresponds to 1 mismatches, 2 inversions, 4		1 match, 2 insertions, 4 matches	2 matches, 4 insertions. 1 m	3 matches, 4, mismatches, 1	2
5 The flow of data formats from raw reads to called variants is	FASTQ -> SAM -> BAM -> VCF	FASTA -> SAM -> BAM -> VCF	FASTQ -> BAM -> CRAM -> VCF	FASTA -> BAM -> SAM -> VCF	1 & 3
6 In the practical session for this module, you made a variant call for the following reads: SM:i:23, RG:Z:ERR003762, ISM:i:37, RG:Z:ERR003762, MQ:i:37, RG:Z:ERR0015472, SM:i:37, RG:Z:ERR003814, MQ:i:37					1
7 In the practical session for this module you made a variant call for the following reads: GRCh38		GRCh37.1	GRCh38.1	hs37d5	4
8 In the practical session for this module you made a variant call for the following reads: 10029			7398	2702	10043
9 In the practical session for this module you made a variant call for the following reads: 53			25	32	60
10 In the practical session for this module you made a variant call for the following reads: Ref T Alt A, Genotype T/T, Ref A Alt G, Genotype G/A, Read Ref G Alt A, Genotype G/G, Read Ref A Alt G, Genotype G/G					4
11 What is a FastQC	a quality check of your FASTQ file	a tool used to obtain your FASTQ file	a tool used by the sequencing platform to check the sequencing data	a file containing your raw sequencing data	1
12 When would a FastQC step be needed in a NGS Bioinformatics analysis	file from the sequencing platform	after the variant calling	file and after running the alignment	file and before running the alignment	4
13 The FastQC report allows you to	obtain metrics to use for variant calling	obtain metrics to decide on potential data filtering / trimming	obtain metrics to skip later alignment stages	obtain metrics to generate a FASTQ file	2
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