Ubiquitous Genomics: Hackathon2

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Problem 1

Number of 1D and 2D reads classified as failed: 265

Number of 1D and 2D reads classified as passed: 1082

Number of 2D reads classified as failed: 258

Number of 2D reads classified as passed: 1082

Fraction of 2D reads in failed folder: 0.97358490566

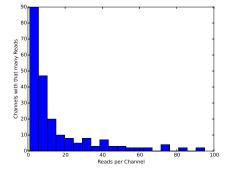
Fraction of 2D reads in passed folder: 1.0

Problem 2

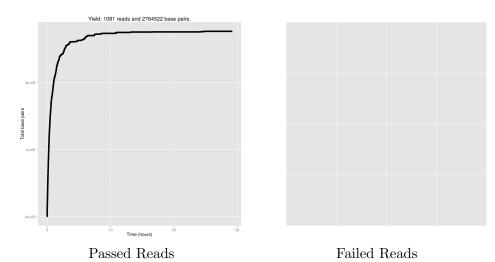
2 channels had at least one read, and 1 had at least five. This compares with 434 "active" channels during initialization, and 651 immediately after loading fuel

The average channel had 1262.0 reads. Channel 29 had 2520 reads, which was the most.

Just for fun, here's a histogram of reads per channel



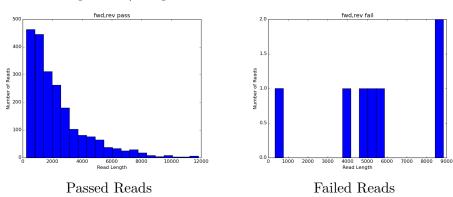
Problem 3



Problem 4

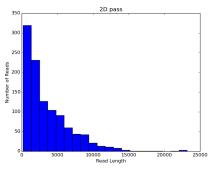
1D reads

The following histograms show the length distribution of 1D reads (both template and complement) for passes and fails.



2D reads

The following histograms show the length distribution of 2D reads for passes and fails.



2D fail

120

100

90

80

400

600

8000

10000

12000

14000

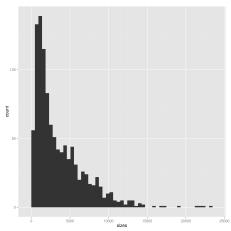
Read Length

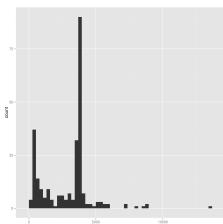
Passed Reads

Failed Reads

1D and 2D reads

The following histogramss show the cumulative length distribution of both 1D and 2D reads for passes and fails.





Passed Reads

Failed Reads

Problem 5

LONGEST TEMPLATE READ

From file: .

Number of nucleotides: 5

LONGEST COMPLEMENT READ

From file: .

Number of nucleotides: 5

LONGEST 2D READ

 $From file: MINION02_Hackathon2_group4_TeamAWESOME_4029_1_ch9_file8_strand.fast5$

Number of nucleotides: 23196