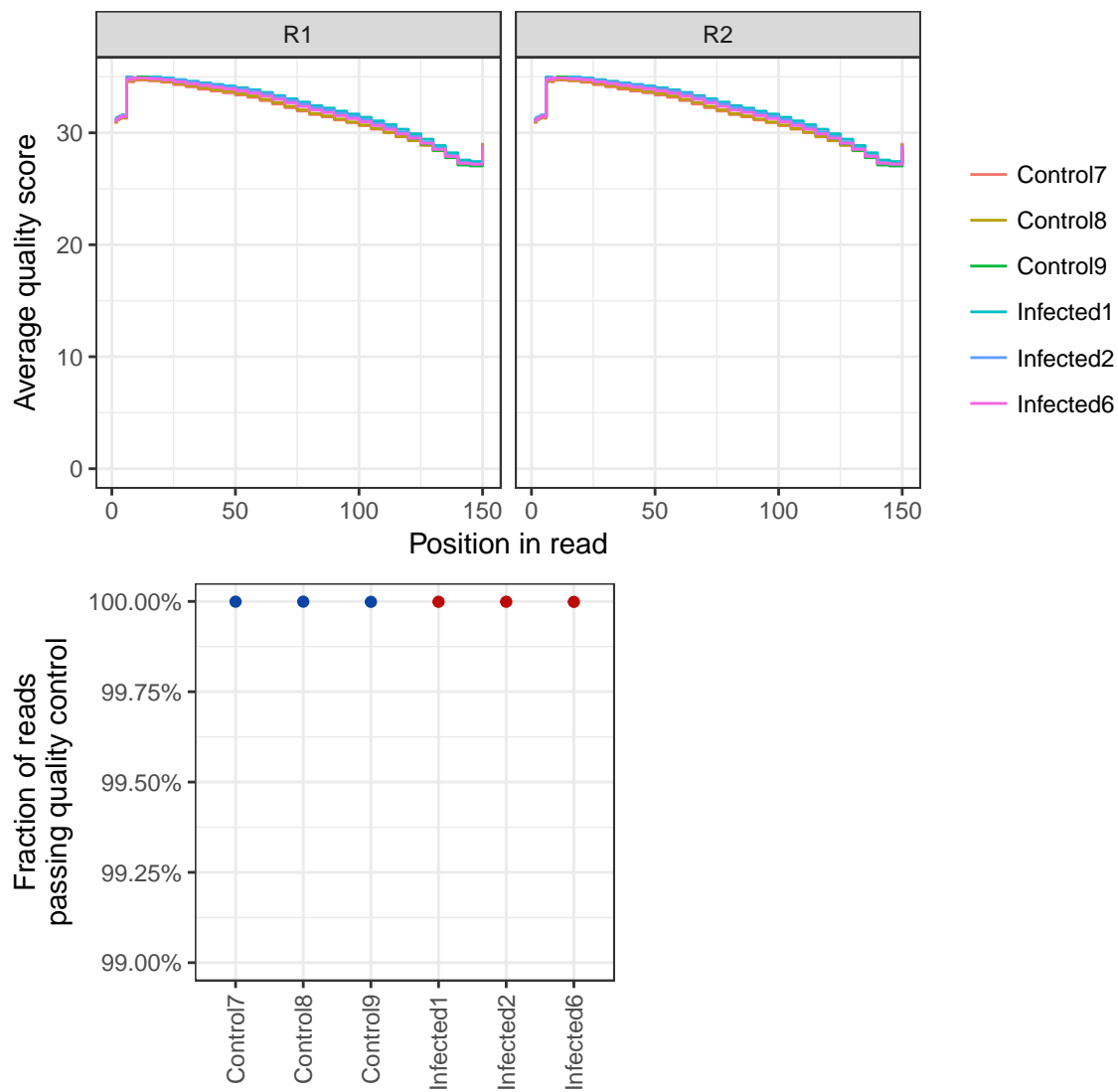
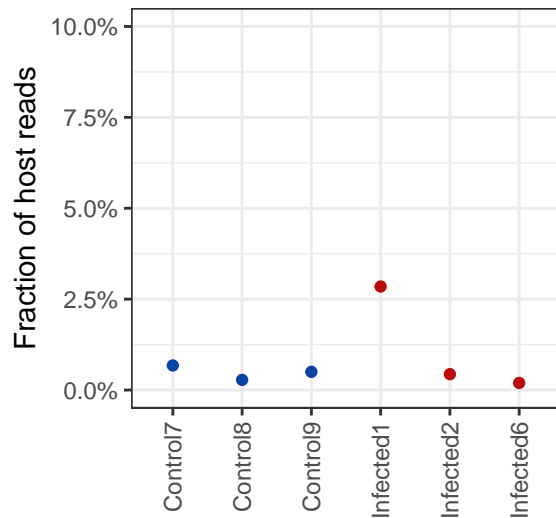


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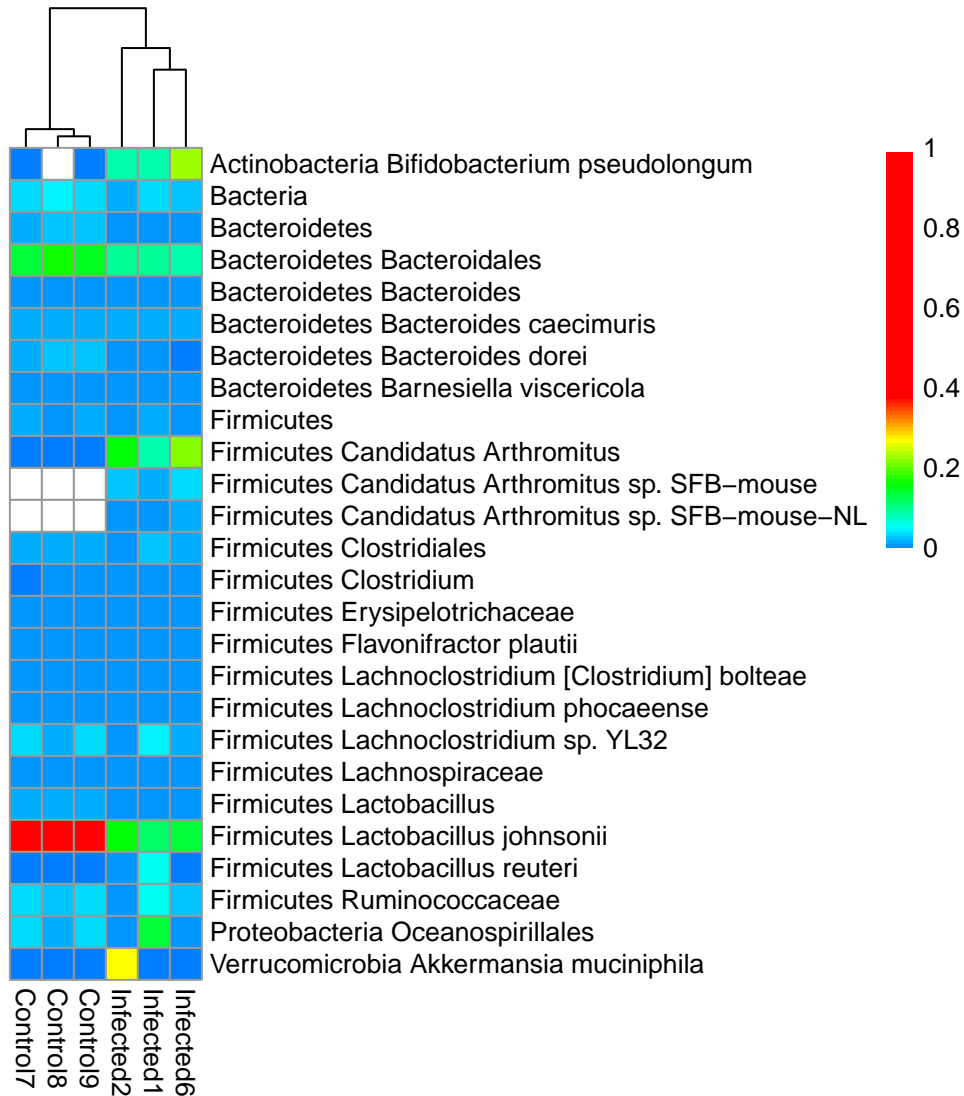
November 8, 2017

Quality Control

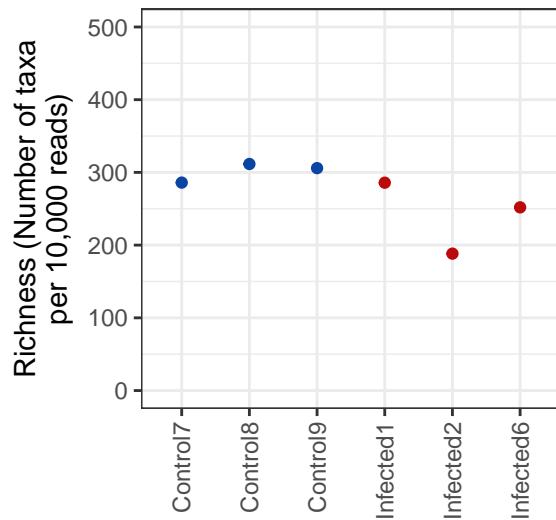




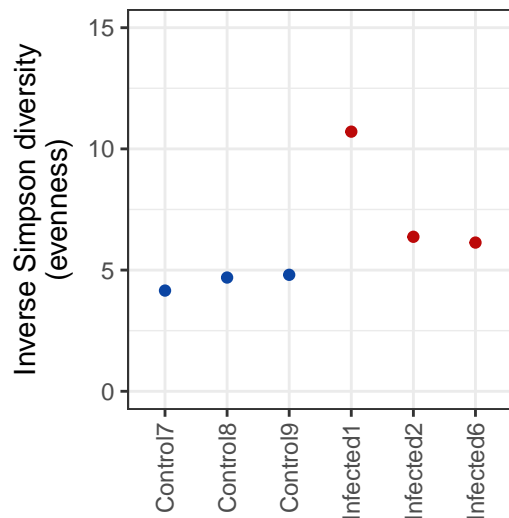
Taxonomic classification



Alpha diversity analysis

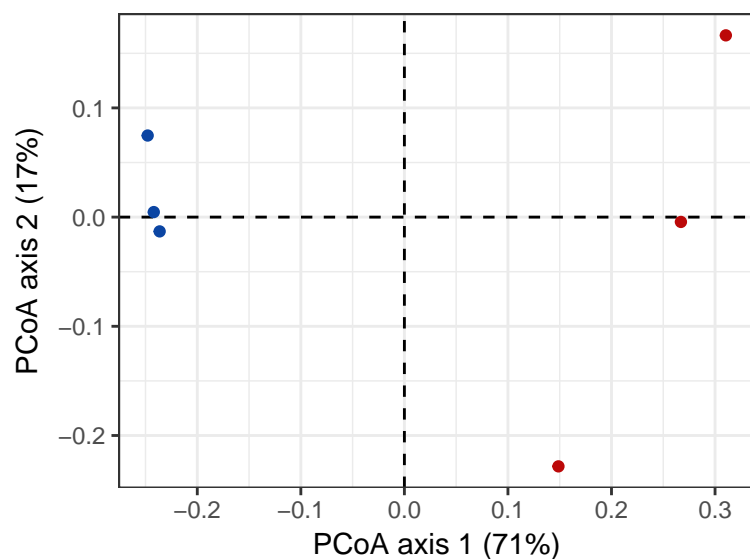


```
##  
## Wilcoxon rank sum test  
##  
## data: Richness10k by study_group  
## W = 9, p-value = 0.1  
## alternative hypothesis: true location shift is not equal to 0
```



```
##  
## Wilcoxon rank sum test  
##  
## data: InvSimpson by study_group  
## W = 0, p-value = 0.1  
## alternative hypothesis: true location shift is not equal to 0
```

Beta diversity analysis



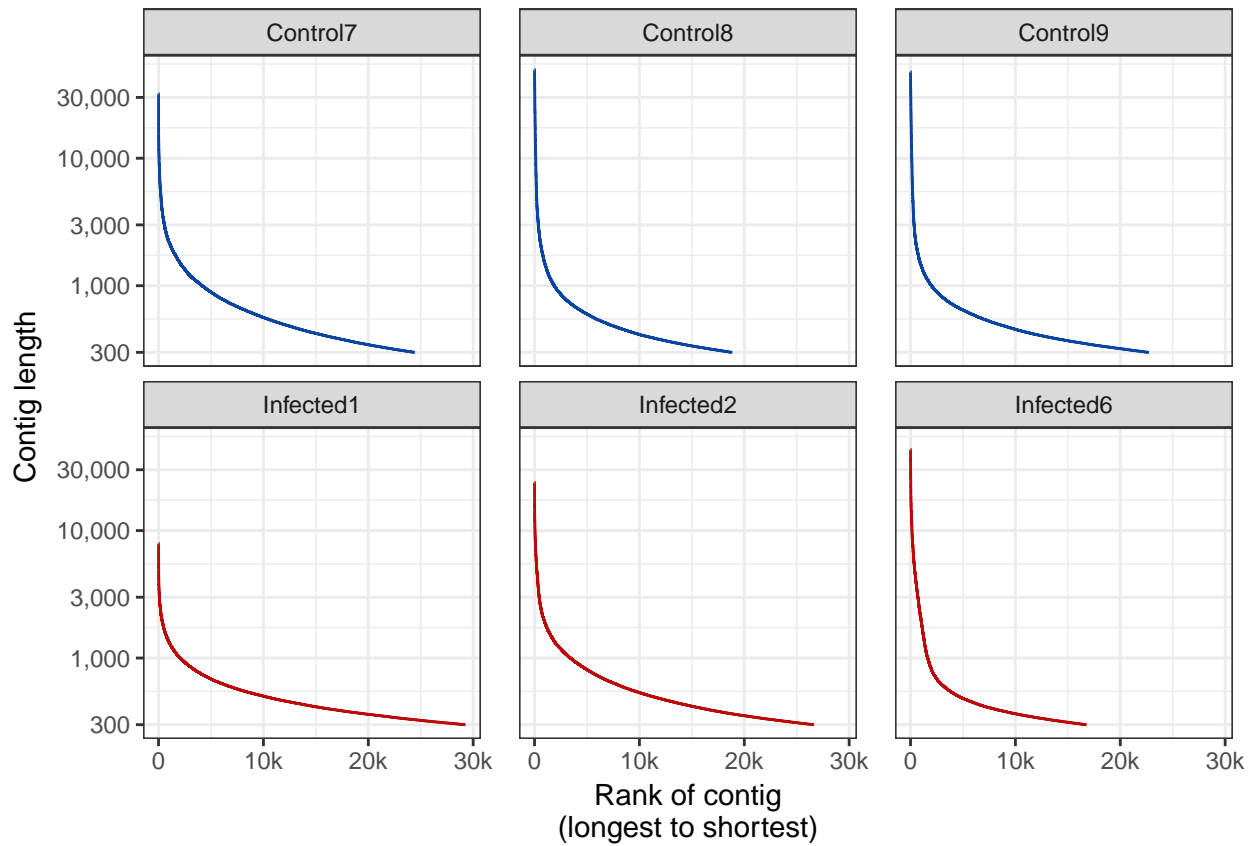
Test for difference in group centroids.

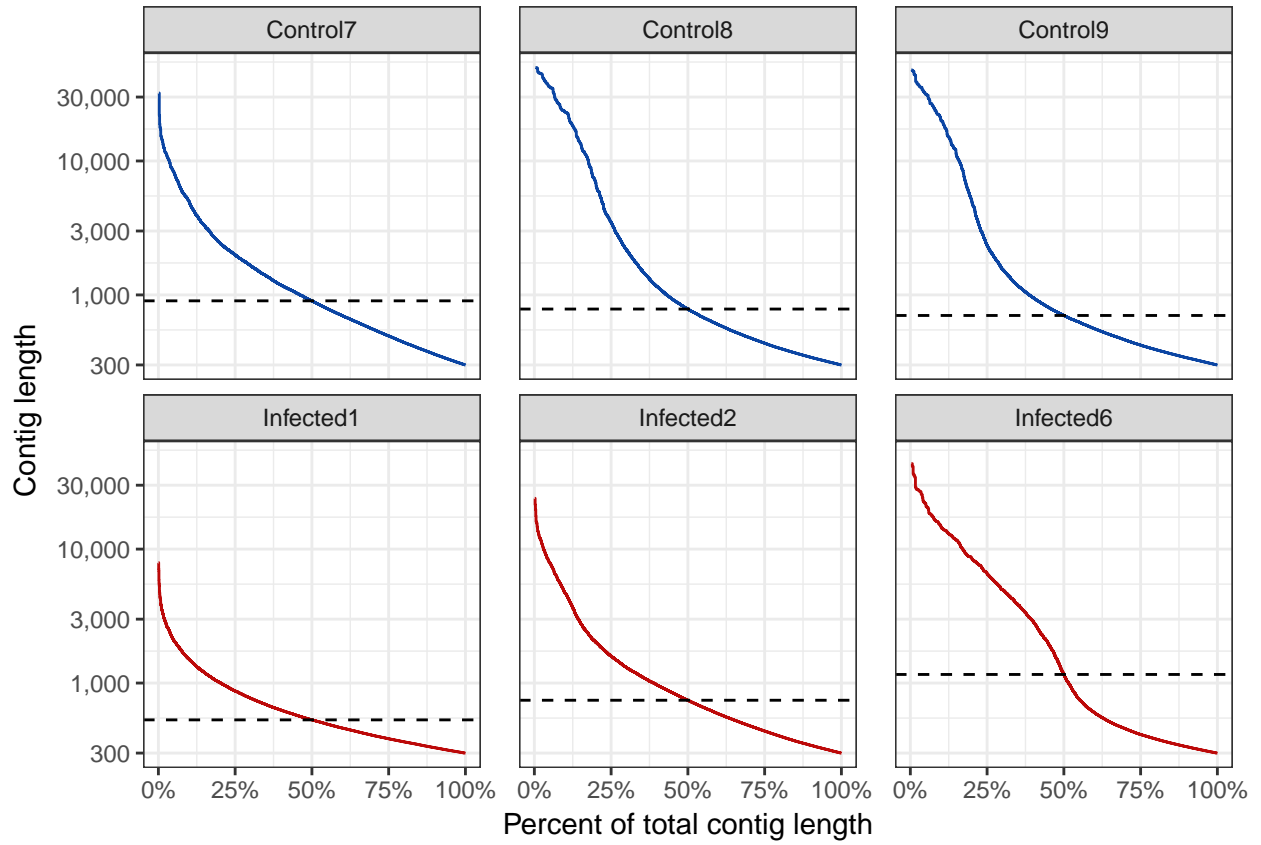
```
##
## Call:
## adonis(formula = bc ~ study_group, data = s)
##
## Permutation: free
## Number of permutations: 719
##
## Terms added sequentially (first to last)
##
##              Df SumsOfSqs MeanSqs F.Model    R2 Pr(>F)
## study_group  1   0.35463 0.35463  8.9694 0.69158   0.1
## Residuals    4   0.15815 0.03954         0.30842
## Total        5   0.51278         1.00000
```

Test for difference in group dispersion.

```
##
## Permutation test for homogeneity of multivariate dispersions
## Permutation: free
## Number of permutations: 719
##
## Response: Distances
##              Df  Sum Sq Mean Sq      F N.Perm  Pr(>F)
## Groups        1 0.038298 0.038298 20.842   719 0.001389 **
## Residuals     4 0.007350 0.001838
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Metagenomic assembly results





SampleID	Group	Total length	Longest contig	N50
Control7	Control	18,649,294	32,165	903
Control8	Control	13,834,766	49,778	784
Control9	Control	15,691,027	47,804	702
Infected1	Infected	15,689,336	7,934	531
Infected2	Infected	18,108,370	23,955	744
Infected6	Infected	13,191,667	43,455	1,159

Antibiotic resistance gene database (CARD) results

SampleID	contig	length	card
Control7	cap3-contigs.fa2216	1440	gb M18896 + 0-1920 ARO:3000190 tetO
Control7	cap3-contigs.fa8723	620	gb M18896 + 0-1920 ARO:3000190 tetO
Control8	cap3-contigs.fa16754	319	gb AP006618.1 + 4835199-4838688 ARO:3000501 Nocardia
Control8	cap3-contigs.fa18519	302	gb M18896 + 0-1920 ARO:3000190 tetO
Control9	cap3-contigs.fa20770	314	gb M18896 + 0-1920 ARO:3000190 tetO
Control9	cap3-contigs.fa11725	418	gb M18896 + 0-1920 ARO:3000190 tetO
Control9	cap3-contigs.fa15461	364	gb M18896 + 0-1920 ARO:3000190 tetO
Control9	cap3-contigs.fa14893	371	gb AJ295238 + 0-1920 ARO:3000196 tet32
Control9	cap3-contigs.fa3510	759	gb M18896 + 0-1920 ARO:3000190 tetO
Control9	cap3-contigs.fa10893	434	gb M18896 + 0-1920 ARO:3000190 tetO
Infected1	cap3-contigs.fa25711	320	gb AJ295238 + 0-1920 ARO:3000196 tet32
Infected1	cap3-contigs.fa14717	419	gb FN594949 + 25244-27167 ARO:3000556 tet44
Infected2	cap3-contigs.fa664	2348	gb Z21523 + 0-1974 ARO:3000191 tetQ
Infected2	cap3-contigs.fa25220	309	gb NC_007779 + 2586250-2589364 ARO:3000491 acrD
Infected2	cap3-contigs.fa22531	330	gb X98831.1 + 361-1555 ARO:3003359 Streptomyces
Infected2	cap3-contigs.fa5696	751	gb Z21523 + 0-1974 ARO:3000191 tetQ
Infected6	cap3-contigs.fa6461	433	gb NC_014638 - 1610636-1613960 ARO:3003730 Bifidobacteria
Infected6	cap3-contigs.fa44	16589	gb AP006618.1 + 4835199-4838688 ARO:3000501 Nocardia
Infected6	cap3-contigs.fa10680	356	gb NC_014638 - 1610636-1613960 ARO:3003730 Bifidobacteria
Infected6	cap3-contigs.fa11957	342	gb M18896 + 0-1920 ARO:3000190 tetO