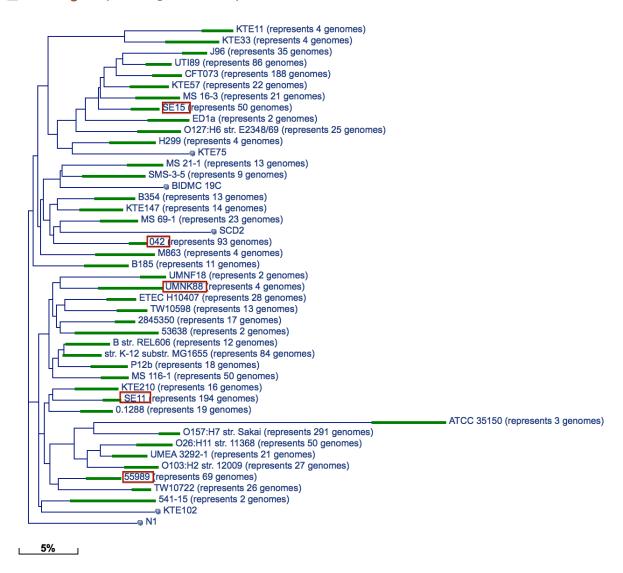


Supplementary Figure 1: Phylogenetic relationships of the *S. aureus* genomes used in the simulation study. The genomes that are highlighted in red boxes were used for generating the reads. This image was obtained and modified from the NCBI: http://www.ncbi.nlm.nih.gov/genome/?term=staphylococcus%20aureus.

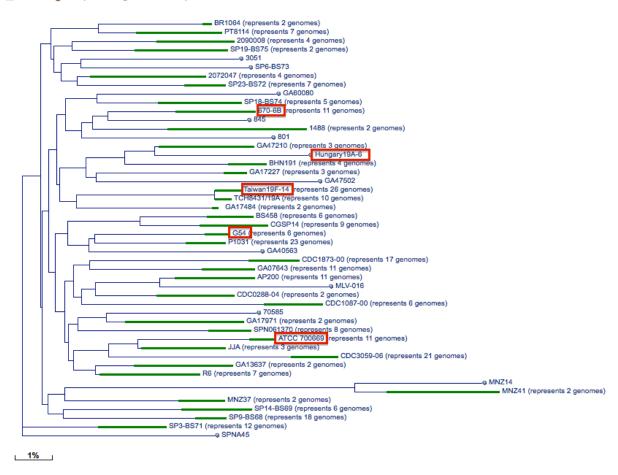
■ Dendrogram (based on genomic BLAST)



Supplementary Figure 2: Phylogenetic relationships of the *E. coli* genomes used in the simulation study. The genomes that are highlighted in red boxes were used for generating the reads. This image was obtained and modified from the NCBI:

http://www.ncbi.nlm.nih.gov/genome/?term=escherichia%20coli





Supplementary Figure 3: Phylogenetic relationships of the *E. coli* genomes used in the simulation study. The genomes that are highlighted in red boxes were used for generating the reads. This image was obtained and modified from the NCBI:

http://www.ncbi.nlm.nih.gov/genome/?term=streptococcus%20pneumoniae