Parent

A

Offspring ATTTATCGGATCGCGAGGCTCTCGATG

ATTTAGCGCTAGGCTAGGCTCTCGATG

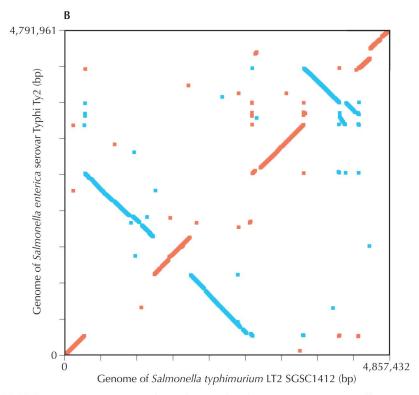


FIGURE 12.4. Inversions. (A) Hypothetical example of an inversion in a small section of DNA. Parental sequence is shown above and the offspring sequence is shown below with the inverted region highlighted in red. (B) Comparison of the genomes of two strains of the bacterial genus Salmonella showing the occurrence of multiple large inversions. The diagram shows a genome dotplot (as in Box 7.1). The genome of one strain is on the x-axis and the other is on the y-axis (with the replication origins at (x, y) = (1, 1)). Conserved regions between the two genomes are indicated by a dot. If the two genomes showed the same total orientation, all the dots would be on the y = x diagonal. The blue segments are inversions between the two strains.

12.4, source generated by author, using the MUMMER program, Comprehensive Microbial Resource