



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 dot plot (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