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Inverted yeast

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After comparing the genomic sequences of the two yeast species *Saccharomyces cerevisiae* and Candida albicans, Seoighe *et al*. report in the December 19 Proceedings of the National Academy of Sciences that gene adjacencies have been broken as frequently by small inversions as by translocations or long-distance transpositions (*Proc Natl Acad Sci USA* 2000, **97**:14433-14437). Only 9% of gene pairs that are adjacent in one species are conserved as adjacent in the other, and the number of orientation changes suggest that approximately 1,100 single gene inversions have occurred in the 140-330 million years since the two species diverged from each other. Using a model of the rearrangements, Seoighe *et al*. conclude that approximately equal numbers of linkages have been broken by small and large rearrangements. The mechanism behind the small inversions is unknown, but small inversions may be favored for either mechanistic reasons or because of natural selection against disruption of meiosis.

References

1. Sequencing of Candida Albicans at Stanford's DNA Sequencing and Technology Center, [http://www-sequence.stanford.edu/group/candida/]

2. Proceedings of the National Academy of Sciences, [http://www.pnas.org/]