

Genetic Recombination

Genomes are not fixed in time and space. Rather, they combine the stability necessary for inheritance with the flexibility required for change. Genetic recombination is the rearrangement of genetic material and, with mutation, is the source of genetic diversity between the individuals of a species. It is therefore one of the central processes of biology and a cornerstone of genetics.

In writing this book on the mechanism of genetic recombination, the author achieves a twofold aim. The first is to introduce the conceptions and experimental strategies that underpin the subject in a form understandable by anyone with a basic knowledge of genetics and biochemistry. The

second is to demonstrate how the different types of recombination, homologous, site-specific, transpositional and illegitimate, are intertwined.

Genetic Recombination offers both the student and the researcher a profound insight into genetic mechanisms.

Cover illustration shows a processed STM image with simulated shading of freeze-dried recA-DNA complexes coated with a Pt-Ir-C film. Provided by DR H. Gross of ETH, Zurich. Excerpted with permission from Amrein *et al.* *Science* 1988 (Reprint series) **240**: 514-16. © 1988 American Association for the Advancement of Science.

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