

*A definitive work focusing on
homologous recombination . . .*

Genetic Recombination

Edited by **Raju S. Kucherlapati**,
University of Illinois College of Medicine, Chicago, Illinois,
and **Gerald R. Smith**, *Fred Hutchinson Cancer Research Center, Seattle, Washington*

Genetic Recombination presents molecular, biochemical, and biological perspectives on recombination, especially homologous recombination, as well as site-specific recombination and so-called illegitimate recombination (in which integration of DNA sequences is achieved without apparent regard to sequence or position homology). The process of recombination is described for bacteria and bacteriophage, yeasts, *Drosophila*, and cultured mammalian cells. Several chapters also deal with the biological consequences of genetic recombination including recombinational control of gene expression and production of chromosomal abnormalities leading to malignancy and birth defects.

This well-integrated treatise will be of interest and value to researchers and students focusing on prokaryotic and eucaryotic genetic recombination and on related topics such as gene expression, protein-DNA interactions, chromosome mechanics, meiosis, gene therapy, and DNA repair.

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Editor

James A. Roth
Iowa State University, Ames, Iowa

Virulence Mechanisms of Bacterial Pathogens brings together the work of leading scientists examining bacterial virulence from different vantage points and disciplines: medicine, veterinary medicine, genetics, biochemistry, immunology, and microbiology. In addition, ongoing research involving higher biological contexts – the habitat of the bacterium, the circumstances under which infection occurs, and, especially, the interaction between pathogens and host defense mechanisms – is related to research at the molecular level.

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Based on an international symposium on *Virulence Mechanisms of Veterinary Bacterial Pathogens* held at Iowa State University, Ames, in June 1987.

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(4 chapters by Arp, Isaacson, Freter, and Hale and Formal)

II. Bacterial Resistance to Humoral Defense Mechanisms

(4 chapters by Woolcock, Widders, Taylor, and Griffiths et al.)

III. Bacterial Resistance to Cellular Defense Mechanisms

(4 chapters by Czuprynski, Storz et al., Goren and Mor, and Collins and Hepper)

IV. Bacterial Toxins in Disease Production

(5 chapters by Rutter, Shewen, Robertson, Freer, and Scheuber et al.)

V. Strategies to Overcome Bacterial Virulence Mechanisms

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VI. Past, Present, and Future Studies (Smith)

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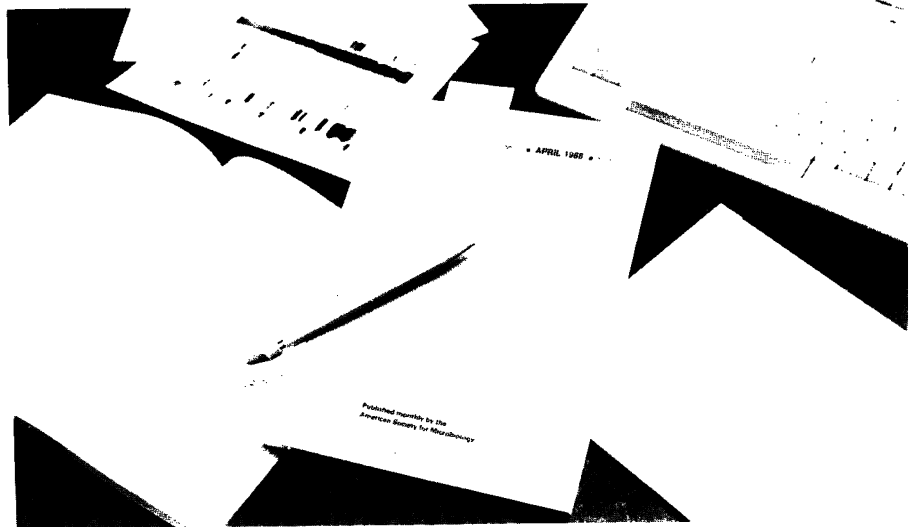
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EDITORS: Stephan E. Mergenhagen and Burton Rosan

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- Intergeneric Coaggregation between Oral Bacteria
- Genetic and Environmental Influences on Bacterial Adherence



The book is intended for microbiologists, infectious disease specialists, dental and medical students, graduate and postgraduate microbiology and dental students, and dental and periodontal researchers. It should be available in medical, dental, and university libraries.

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DNA Replication and Mutagenesis

Edited by

Robb E. Moses

*Department of Cell Biology, Baylor
College of Medicine, Houston, Texas,
and*

William C. Summers

*Department of Therapeutic Radiology,
Yale University School of Medicine, New
Haven, Connecticut*

DNA Replication and Mutagenesis contains current approaches for studying the role of DNA replication in mutagenesis. Biochemical and genetic analyses are described for both procaryotes and eucaryotes. Most mutagenesis appears to be the result of functions occurring during DNA replication. The purpose of this book is to review recent investigations of these functions and the contribution of each of them to mutagenesis of the genome.

This book will interest researchers in molecular biology and genetics, biochemistry, nucleic acid enzymology, and toxicology and pharmacology, as well as graduate students in the biological sciences or in advanced medical school programs. Based on an ASM conference held in November 1987, on Marco Island, Florida.

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