

Linking two rapidly advancing fields....

DNA Replication and Mutagenesis

Edited by

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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 prokaryotes and eukaryotes. 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.

Below are the condensed contents of this book. To order, complete the form at the bottom of the page and return it to ASM.

Condensed Contents

PART I. Enzymology of DNA Replication (7 chapters by Kornberg et al., McHenry et al., Lee et al., Reha-Krantz, Hickey et al., Abbotts et al., and Lee)

PART II. DNA Replication Systems (12 chapters by Nakai et al., Campbell et al., Abeles and Austin, Masai and Arai, Blanco et al., Lindberg et al., Laffan and Firshein, Kline et al., Meyer et al., Liu and Norwood, Hacker et al., and Roberts and Kunkel)

PART III. Mechanisms of Misincorporation (8 chapters by Preston et al., Beardsley et al., Joyce et al., Ripley and Papanicolaou, Shiber and Sinha, Maurer et al., Kaufman, and Fuchs et al.)

PART IV. Bypass Synthesis (8 chapters by Bridges et al., Goodman et al., Livneh et al., Bryan et al., Sahn et al., Schaaper and Dunn, Maenhaut-Michel, and Bessho et al.)

PART V. Genetic Control of Mutagenesis (5 chapters by Nohmi et al., Eckardt-Schupp, Kushner and Phillips, Hayes, and Balbinder)

PART VI. Damage-Directed Mutagenesis (9 chapters by LeClerc et al., Eisenstadt, Moriya et al., Drinkwater et al., Lee and Cerami, Berry, Lirette and Caradonna, Williams and Pollack, and Rebeck et al.)

PART VII. Induced Mutagenesis (4 chapters by Herrlich, Maher et al., Dixon et al., and Greggio et al.)

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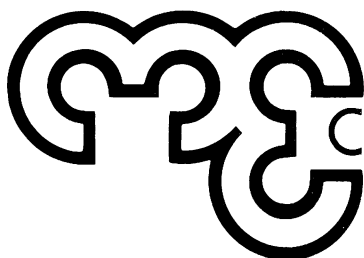
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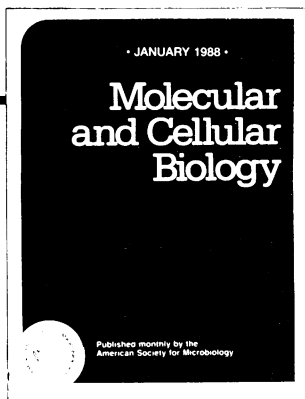
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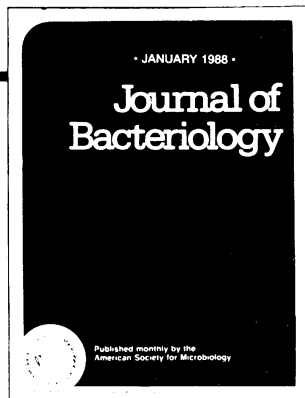
MCB is devoted to the advancement and dissemination of fundamental knowledge concerning the molecular biology of eucaryotic cells, of both microbial and higher organisms. The journal publishes papers on cellular morphology and function, genome organization, regulation of genetic expression, morphogenesis, and somatic cell genetics. In addition, it contains articles concerning plasmid vectors and virus-infected cells in which emphasis is clearly on the cell.

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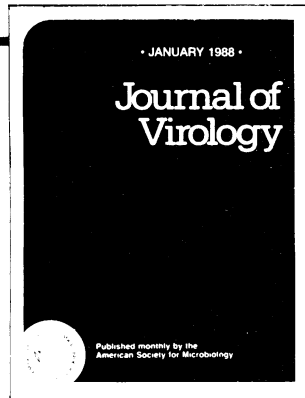
The oldest of the ASM journals, JB is *the* leading periodical, worldwide, in its field. It is devoted to the advancement and dissemination of fundamental knowledge concerning bacteria and other microorganisms, including fungi and other unicellular, eucaryotic organisms. Regular features include articles on structure and function, plant microbiology, membranes, eucaryotic cells, genetics and molecular biology, plasmids and transposons, physiology and metabolism, and enzymology.

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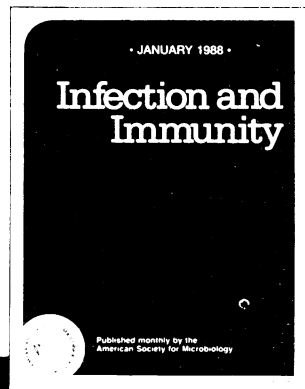
This leading research journal is devoted to the dissemination of fundamental knowledge concerning viruses of bacteria, plants, and animals. JVI publishes reports of original research in all areas of basic virology, including biochemistry, biophysics, genetics, immunology, morphology, physiology, and pathogenesis and immunity.

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The development of recombinant DNA and other genetic techniques, along with an increased awareness of the impact of humanity on the environment, has led to debate on the benefits and risks of releasing the living products of these techniques into the environment.

How can such organisms be designed for maximum benefit and minimum risk? How can these qualities be predicted and assessed?

These issues were addressed by distinguished scientists from a variety of fields—ecology, genetics, microbiology, molecular biology—at a symposium organized by ASM in collaboration with seven other scientific societies. Their contributions are presented in *Engineered Organisms in the Environment: Scientific Issues*.

Focus on Design and Risk-Benefit Analysis

Case history presentations cover the development of several projects that are close to practical application. The ecology of the introduction of organisms into a new environment is examined from many perspectives. Papers and discussions focus on assessment techniques and risk analysis.

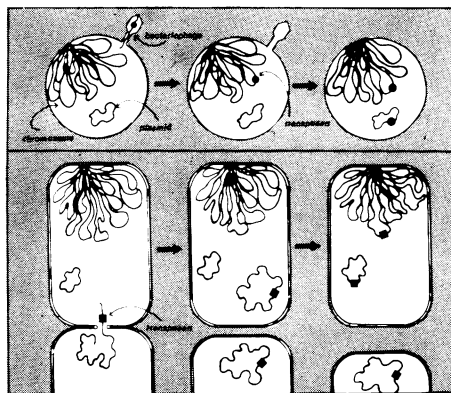
The volume follows the sym-

ENGINEERED ORGANISMS IN THE ENVIRONMENT SCIENTIFIC ISSUES

Proceedings of a Cross-Disciplinary Symposium Held in Philadelphia, Pennsylvania, 10-13 June 1985

Editors:

**Harlyn O. Halvorson
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posium sessions:

- State of the Art: Case Histories
- Genetic Variation and Gene Transfer
- Other Introductions into the Environment
- Biological Responses to Perturbation: Genome to Ecosystem
- Future Trends: Toward a Predictive Capability

Essential Reading for Scientists and Laymen

Nonscientists involved in public policy on biotechnology will be interested in the lay summary of the book, written by Bernard Dixon, as well as the session summaries and the floor discussions.

Genetically engineered organisms, their development and their wise use, are the concern of many fields ranging from macroecology to molecular biology. A free flow of information among related scientific disciplines is essential. *Engineered Organisms in the Environment: Scientific Issues* is a significant contribution to this important, ongoing dialogue.

Publication date: December 1985
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An Annotated Compilation of the Worlds Literature on Asbestos—1906 - 1986

Author: Premysl V. Pelnar, M.D.

Editor: George H. Scherr, Ph.D.

This comprehensive compilation and English abstracts of the worlds literature on asbestos and other mineral fibres and their health implications comprises 5,692 documents, organized and cross-indexed by:

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- Author Index
- Index by Year of Publication
- Subject Index
- Index by Country of Study

LIST OF TOPICS

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Pulmonary function findings
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Ferruginous bodies in lymph nodes
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Asbestos fibres and dust in sputum
Asbestos fibres and dust in lymph nodes
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Other Lung Diseases

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Fibrosis other than pneumoconiotic
Tuberculosis (incl. studies of tubercle bacilli)

Kinds of Asbestos

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Amphiboles

Crocidolite
Amosite
Tremolite
Actinolite
Anthophyllite

Other Minerals (excl. silica and asbestos)

Talc
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Fiberglass
Other

Physical and Chemical Properties and Identification of Fibres

Volumes of Production and Consumption of Asbestos

Occupations with Asbestos Hazard

Mining and Milling asbestos
Textile (asbestos) industry
Processing asbestos industry other than textile (asbestos-cement)
Insulation work with asbestos (incl. construction and shipbuilding)
Other occupations with asbestos hazard

Legal Aspects of Asbestos Problem (incl. compensation)

Form of Study

Epidemiological study
Clinical cases (incl. their pathological descriptions)
Experiments in animals including tissue culture studies
Pathological anatomical studies—without clinical part
Electron microscopic studies
Immunological studies
Methods and techniques

Countries where Study was Done

United States of America
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