

THIRD EDITION

Molecular Biotechnology

PRINCIPLES AND APPLICATIONS
OF RECOMBINANT DNA

Bernard R. Glick, University of Waterloo, Waterloo, Ontario, Canada

Jack J. Pasternak, University of Waterloo, Waterloo, Ontario, Canada

Completely revised, updated, and expanded, the third edition of the best-selling *Molecular Biotechnology: Principles and Applications of Recombinant DNA* covers the underlying scientific principles and deals extensively with the many industrial, agricultural, pharmaceutical, and biomedical applications of recombinant DNA technology.

New in the Third Edition

- Significantly updated to reflect recent developments in biotechnology and the societal issues related to it, such as cloning, gene therapy, and patenting and releasing genetically engineered organisms
- Expanded coverage of directed mutagenesis and protein engineering, therapeutic agents, and genetic engineering of plants
- Numerous recent examples replace those from the mid-1990s and earlier
- Over 200 new figures illustrate the added concepts and principles

Also available from ASM Press

Recombinant DNA and Biotechnology, Second Edition

A Guide for Teachers / A Guide for Students

Helen Kreuzer, Carolina Biological Supply Company

Adrianne Massey, A. Massey & Associates

Written in clear, easy-to-understand language, this best-selling reference text/activity manual offers easy-to-implement lessons and classroom activities. Part I covers basic molecular biology, Part II offers imaginative dry labs and wet labs, and Part III is an innovative section addressing the social issues and public concerns of biotechnology. Extensive appendixes provide important background information on basic laboratory techniques and teaching resources, including overhead masters and templates. *Recombinant DNA and Biotechnology* will enable college and precollege teachers to plan and conduct an exciting and contemporary course on the basic principles, essential laboratory activities, and relevant social issues and concerns attendant to today's molecular biology revolution.

Biocatalysis and Biodegradation: Microbial Transformation of Organic Compounds

Lawrence P. Wackett, University of Minnesota

C. Douglas Hershberger, University of Minnesota

Designed for use as a textbook and resource for professional scientists working in the areas of industrial microbiology, environmental microbiology, and biodegradation, this important text details both the fundamental concepts of the microbial transformation of organic compounds and its application for biotechnology and biodegradation. It offers comprehensive coverage of microbial catabolism from the group that developed the Biocatalysis/Biodegradation Database on the Web and discusses the logic of catabolism, which is important in the context of genome annotation and predicting biodegradation reactions.



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