



## CONTENTS

BASIC PROCESSES UNDERLYING AGROBACTERIUM-MEDIATED DNA TRANSFER TO PLANT CELLS, <i>Patricia Zambryski</i>	1
HLA DISEASE ASSOCIATIONS: MODELS FOR INSULIN DEPENDENT DIABETES MELLITUS AND THE STUDY OF COMPLEX HUMAN GENETIC DISORDERS, <i>Glenys Thomson</i>	31
MECHANISMS OF THE EFFECTS OF ANEUPLOIDY IN MAMMALS, <i>Charles J. Epstein</i>	51
THE MECHANISM OF CONSERVATIVE SITE-SPECIFIC RECOMBINATION, <i>Nancy L. Craig</i>	77
CONTROL OF ANTIGEN GENE EXPRESSION IN AFRICAN TRYPANOSOMES, <i>E. Pays and M. Steinert</i>	107
DIFFERENTIAL IMPRINTING AND EXPRESSION OF MATERNAL AND PATERNAL GENOMES, <i>Davor Solter</i>	127
RECOMBINATION BETWEEN REPEATED GENES IN MICROORGANISMS, <i>Thomas D. Petes and Charles W. Hill</i>	147
DNA DOUBLE-CHAIN BREAKS IN RECOMBINATION OF PHAGE $\lambda$ AND OF YEAST, <i>David S. Thaler and Franklin W. Stahl</i>	169
MECHANISMS OF X CHROMOSOME REGULATION, <i>Stephen G. Grant and Verne M. Chapman</i>	199
THE GENETICS OF BOVINE PAPILLOMAVIRUS TYPE 1, <i>Paul F. Lambert, Carl C. Baker, and Peter M. Howley</i>	235
LINKED SETS OF GENETIC MARKERS FOR HUMAN CHROMOSOMES, <i>Ray White and Jean-Marc Lalouel</i>	259
CLASSICAL AND MOLECULAR GENETICS OF TOMATO: HIGHLIGHTS AND PERSPECTIVES, <i>Charles M. Rick and John Yoder</i>	281
MENDELIAN HYPERPHENYLALANINEMIA, <i>Charles R. Scriver, Seymour Kaufman, and Savio L. C. Woo</i>	301
MAMMALIAN GENOME ORGANIZATION: AN EVOLUTIONARY VIEW, <i>Stephen J. O'Brien, Hector N. Seuanez, and James E. Womack</i>	323
MAIZE DEVELOPMENTAL GENETICS: GENES OF MORPHOGENESIS, <i>William F. Sheridan</i>	353

SPLICEOSOMAL snRNAs, <i>C. Guthrie and B. Patterson</i>	387
FOREIGN GENES IN PLANTS: TRANSFER, STRUCTURE, EXPRESSION AND APPLICATIONS, <i>Kurt Weising, Jeff Schell, and Günter Kahl</i>	421
DISSECTING MULTISTEP TUMORIGENESIS IN TRANSGENIC MICE, <i>Douglas Hanahan</i>	479
PHYLOGENIES FROM MOLECULAR SEQUENCES: INFERENCE AND RELIABILITY, <i>Joseph Felsenstein</i>	521
BIOLOGICAL REGULATION BY ANTISENSE RNA IN PROKARYOTES, <i>R. W. Simons and N. Kleckner</i>	567
GENETICS OF DUCHENNE MUSCULAR DYSTROPHY, <i>Ronald G. Worton and Margaret W. Thompson</i>	601
THE HEAT-SHOCK PROTEINS, <i>S. Lindquist and E. A. Craig</i>	631
INDEXES	
Subject Index	679
Cumulative Index of Contributing Authors, Volumes 18-22	699
Cumulative Index of Chapter Titles, Volumes 18-22	701