



ANNUAL REVIEW OF GENETICS

VOLUME 31, 1997

ALLAN CAMPBELL, *Editor*
Stanford University, Stanford

WYATT ANDERSON, *Associate Editor*
University of Georgia, Athens

ELIZABETH W. JONES, *Associate Editor*
Carnegie Mellon University, Pittsburgh



CONTENTS

ANTISENSE RNA-REGULATED PROGRAMMED CELL DEATH, <i>Kenn Gerdes, Alexander P. Gulyaev, Thomas Franch, Kim Pedersen, Nikolaj D. Mikkelsen</i>	1
GENETICS OF ERYTHROPOEISIS: INDUCED MUTATIONS IN MICE AND ZEBRAFISH, <i>Stuart H. Orkin, Leonard I. Zon</i>	33
GENETIC ANALYSIS OF CHLOROPHYLL BIOSYNTHESIS, <i>Jon Y. Suzuki, David W. Bollivar, Carl E. Bauer</i>	61
GENE AMPLIFICATION AND GENOME PLASTICITY IN PROKARYOTES, <i>David Romero, Rafael Palacios</i>	91
HOST-PATHOGEN INTERACTIONS DURING ENTRY AND ACTION-BASED MOVEMENT OF <i>LISTERIA MONOCYTOGENES</i> , <i>Keith Ireton, Pascale Cossart</i>	113
GENETICS OF PRIONS, <i>Stanley B. Prusiner, Michael R. Scott</i>	139
VIRAL TRANSACTIVATING PROTEINS, <i>Jane Flint, Thomas Shenk</i>	177
PROCESSING OF RECOMBINATION INTERMEDIATES BY THE RuvABC PROTEINS, <i>Stephen C. West</i>	213
MATING TYPE IN FILAMENTOUS FUNGI, <i>J. W. Kronstad, C. Staben</i>	245
YEAST GENETICS TO DISSECT THE NUCLEAR PORE COMPLEX AND NUCLEOCYTOPLASMIC TRAFFICKING, <i>Emmanuelle Fabre, Ed Hurt</i>	277
MOLECULAR GENETIC BASIS OF ADAPTIVE SELECTION: EXAMPLES FROM COLOR VISION IN VERTEBRATES, <i>Shozo Yokoyama</i>	315
MODERN THOUGHTS ON AN ANCIENT MARINER: FUNCTION, EVOLUTION, REGULATION, <i>Daniel L. Hartl, Allan R. Lohe, Elena R. Lozovskaya</i>	337
THE GENETIC PROGRAM FOR GERM-SOMA DIFFERENTIATION IN VOLVOX, <i>David L. Kirk</i>	359
TRANSPOSABLE ELEMENT-HOST INTERACTIONS: REGULATION OF INSERTION AND EXCISION, <i>Mariano Labrador, Victor G. Corces</i>	381
GERMLINE CYST FORMATION IN DROSOPHILA, <i>M. de Cuevas, M. A. Lilly, A. C. Spradling</i>	405

CONSEQUENCES OF CHROMOSOMAL TRANSLOCATIONS IN TUMOR DEVELOPMENT, <i>Isidro Sánchez-García</i>	429
THE TAO OF STEM CELLS IN THE GERMLINE, <i>Haifan Lin</i>	455
GENOMIC IMPRINTING IN MAMMALS, <i>Marisa S. Bartolomei, Shirley M. Tilghman</i>	493
GENE TARGETING AND THE BIOLOGY OF LEARNING AND MEMORY, <i>Alcino J. Silva, Alan M. Smith, Karl Peter Giese</i>	527
USE OF ARABIDOPSIS FOR GENETIC DISSECTION OF PLANT DEFENSE RESPONSES, <i>J. Glazebrook, E. E. Rogers, F. M. Ausubel</i>	547
X-CHROMOSOME INACTIVATION IN MAMMALS, <i>Edith Heard, Phillippe Clerc, Philip Avner</i>	571
TEMPORAL PATTERN FORMATION BY HETEROCHRONIC GENES, <i>Frank Slack, Gary Ruvkun</i>	611
ATAXIA-TELANGIECTASIA AND THE NIJMEGEN BREAKAGE SYNDROME: RELATED DISORDERS BUT GENES APART, <i>Y. Shiloh</i>	635
UNDERSTANDING GENE AND ALLELE FUNCTION WITH TWO-HYBRID METHODS, <i>Roger Brent, Russell L. Finley Jr.</i>	663
INDEXES	
Subject Index	705
Cumulative Index of Contributing Authors, Volumes 27-31	719
Cumulative Index of Chapter Titles, Volumes 27-31	721