



from

Cold Spring Harbor Laboratory Press

NEWLY
PUBLISHED!

Telomeres

Monograph 29

Edited by Elizabeth H. Blackburn, *University of California, San Francisco*; Carol W. Greider, *Cold Spring Harbor Laboratory*

Research on telomeres has recently surged forward. Telomeres have been found to shorten in neoplastic and aging cells, and their analysis has been stimulated by the molecular cloning of key components in telomere metabolism. This is therefore a timely book, a comprehensive account of telomere structure and function in a variety of organisms including yeast, *Drosophila*, ciliates, plants and mammals. Starting with a historical overview, it covers telomere structure, dynamics, localization, transcriptional silencing, as well as the significance of length regulation and the roles of telomeres. Written and edited by members of leading laboratories worldwide, this book will

have lasting value for investigators of cancer and aging as well as those with interests in replication, ribonuclear particles, chromosome dynamics and polymerases.

CONTENTS

Beginning of the End: Origins of the Telomere Concept (J.G. Gall); Telomere DNA Structure (E. Henderson); Telomerase Biochemistry and Regulation (C.W. Greider); Telomere Proteins (G. Fang, T.R. Cech); *Saccharomyces* Telomeres: Function, Structure, and Replication (V.A. Zakian); Telomere Position Effects and Transcriptional Silencing in the Yeast *Saccharomyces cerevisiae* (D. Shore); Developmentally Programmed Healing of Chromosomes (E.H. Blackburn); Non-programmed and Engineered Chromosome Breakage (H. Cooke); Telomeres and Aging (C.B. Harley); Telomere Dynamics and Genome Instability in Human Cancer (T. de Lange); Cytology of Telomeres (A.F. Dernburg et al.); *Drosophila* Telomeres: Another Way to End It All (M.-L. Pardue); Plant Telomeres (E.J. Richards)

1995, 396 pp., illus., index ISBN 0-87969-457-2
Cloth \$80

NEWLY
PUBLISHED!

Translational Control

Monograph 30

Edited by John W.B. Hershey, *University of California, Davis*; Michael B. Mathews, *Cold Spring Harbor Laboratory*; Nahum Sonenberg, *McGill University, Montreal*

Patterns of protein synthesis and gene expression are much influenced by changes in the efficiency of mRNA translation. Translation is controlled at many levels and the complexity of this regulation has been clearly revealed by the recent application of biochemical and genetic techniques. This monograph is a broad, critical and comprehensive account of the numerous control mechanisms observed in eukaryotes. Written and edited by leaders in the field, the book is a timely work of reference for both specialists and investigators with wider interests in gene expression, RNA biology, and protein synthesis.

CONTENTS

Origins and Targets of Translational Control (M.B. Mathews, N. Sonenberg, and J.W.B. Hershey); The Pathway and Mechanism of Eukaryotic Protein Synthesis (W.C. Merrick and J.W.B. Hershey); A Comparative View of Initiation Site Selection Mechanisms (R.J. Jackson); Binding of Initiator Methionyl-tRNA to Ribosomes (H. Trachsel); Protein Kinases That Phosphorylate eIF2 and eIF2B, and Their Role in Eukaryotic Cell Translational Control (M.J. Clemens);

Translational Control Mediated by Upstream AUG Codons (A.P. Geballe); Translational Control of GCN4: Gene-specific Regulation by Phosphorylation of eIF2 (A.G. Hinnebusch); mRNA 5' Cap-binding Protein eIF4E and Control of Cell Growth (N. Sonenberg); Translational Control during Heat Shock (R.F. Duncan); Regulation of Protein Synthesis by Calcium (A.C. Nairn and H.C. Palfrey); Masked and Translatable Messenger Ribonucleoproteins in Higher Eukaryotes (A.S. Spirin); Translational Control of Ferritin (T.A. Rouault, R.D. Klausner, and J.B. Harford); Translational Control of Ribosomal Protein mRNAs in Eukaryotes (O. Meyuhas, D. Avni, and S. Shama); Ribosomal Protein S6 Phosphorylation and Signal Transduction (H.B.J. Jefferies and G. Thomas); Translational Control of Developmental Decisions (M. Wickens, J. Kimble, and S. Strickland); Poly(A) Metabolism and Translation: The Closed-loop Model (A. Jacobson); Dynamics of Poly(A) Addition and Removal during Development (J.D. Richter); Interactions between Viruses and the Cellular Machinery for Protein Synthesis (M.B. Mathews); Initiation of Translation by Picornavirus RNAs (E. Ehrenfeld); Adenovirus and Vaccinia Virus Translational Control (R.J. Schneider); Translational Control in Cells Infected with Influenza Virus and Reovirus (M.G. Katze); Translational Coupled Degradation of mRNA in Eukaryotes (N.G. Theodorakis and D.W. Cleveland); Regulatory Recoding (J.F. Atkins and R.F. Gesteland); Mammalian Ribosomes: The Structure and the Evolution of the Proteins (I.G. Wool, Y.-L. Chan, and A. Gluck); Genetics of Mitochondrial Translation (T.D. Fox); Control of Translation Initiation in Prokaryotes (H.O. Voorma)

1996, 794 pp., illus., index ISBN 0-87969-458-0
Cloth \$115

To order, or request additional information

Call: 1-800-843-4388 (Continental U.S. and Canada) 516-349-1930 (All other locations)

FAX: 516-349-1946

E-MAIL: cshpress@cshl.org or World Wide Web Site <http://www.cshl.org/>

Write: CSHL Press, 10 Skyline Drive, Plainview, NY 11803-2500





Genome Resources Update

Come visit our new home and our new homepage! The frequently updated homepage, found at <http://www.resgen.com>, has all of our latest product updates, as well as online database queries and ordering for MAPPAIRS™ and cDNA clones. Visitors to the homepage can view our latest product catalog, our company newsletter *Resources*, find links to many other genetics related web sites, and view product FAQs and send additional questions via e-mail. We have tried to make our homepage as user friendly as possible and welcome your comments on its contents. The future will bring many more changes and updates to the homepage, so check back often and see what's new.

Over 20,000 Microsatellite Markers

Over 20,000 microsatellite markers are now available. In addition to approximately 10,000 human and 6,000 mouse markers, we have microsatellites for rat, pig, chimpanzee, bovine, canine, ovine, porcine, wild rabbit, zebrafish, arabidopsis, watermelon, barley, white pine, soybean, rice and sweet potato. Over three thousand markers are available with fluorescent labels including genome wide screening sets for human and mouse.

Three Human Radiation Hybrid Panels

Research Genetics now offers three different human Radiation Hybrid Mapping Panels. The Stanford G3 panel is a medium resolution, 8,000 rad panel consisting of 83 clones and two controls. The GENEBRIDGE 4 panel is a lower resolution, 3,000 rad panel consisting of 93 clones and two controls. The newly developed Stanford TNG panel is a high resolution, 50,000 rad panel consisting of 86 clones and two controls. Please see our homepage at <http://www.resgen.com> for more information on any of these panels.

I.M.A.G.E. Consortium cDNA Clones

Massive cDNA sequencing and gene based STS mapping are making clones for the majority of the human genes available to investigators with unprecedented ease.

Research Genetics now offers these cDNA clones from the I.M.A.G.E. Consortium libraries to all researchers. Please see our homepage at <http://www.resgen.com> for more details on this new resource and to query the cDNA database and place your order.

Research Genetics would like to congratulate Jean Weissenbach and his group on their recently published comprehensive genetic map of the human genome. *Nature* March 14, 1996 p. 152-154. We join the whole community in saying 'thank you' for this invaluable resource.

The use of microsatellite markers for genetic analysis is covered by U.S. and foreign patents. The exclusive right to manufacture and sell these markers has been licensed to Research Genetics.

Research Genetics, Inc.

2130 Memorial Pkwy, SW • Huntsville, AL • 35801

U.S. or Canada 800-533-4363 • U.K. 0-800-89-1393 • FAX 205-536-9016

Homepage <http://www.resgen.com>