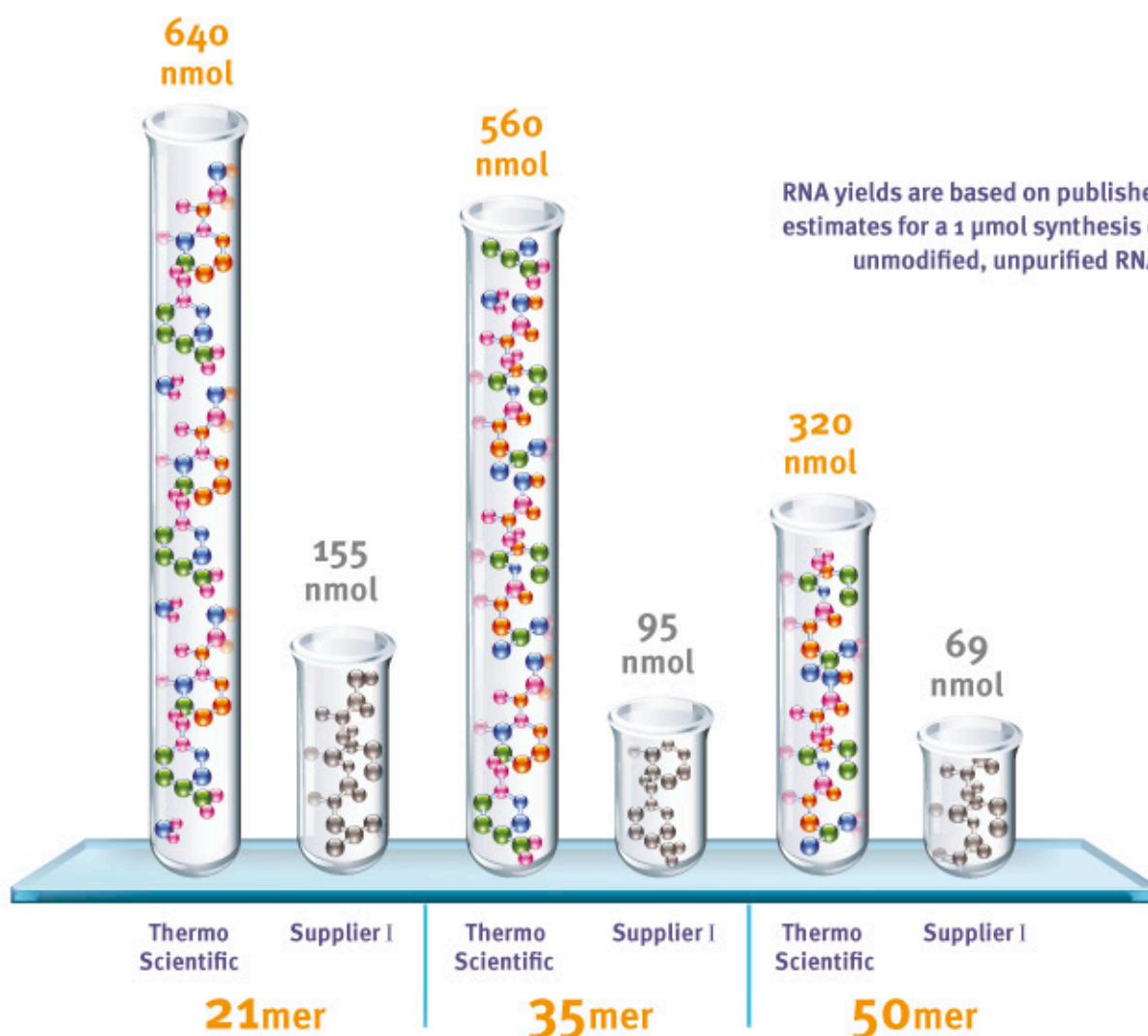


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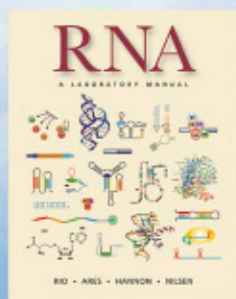
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RNA: A Laboratory Manual

By Donald C. Rio, Manuel Ares, Jr., Gregory J. Hannon and Timothy W. Nilsen

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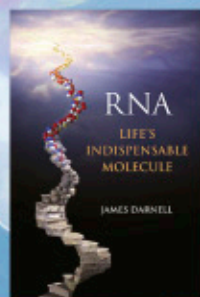
2011, 586 pp., illus., appendices, index

Hardcover \$246

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RNA: Life's Indispensable Molecule

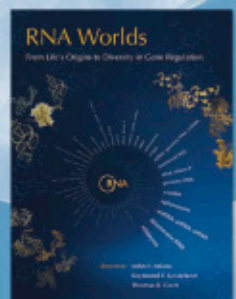
By James E. Darnell

In *RNA: Life's Indispensable Molecule*, Jim Darnell provides a comprehensive and captivating account of RNA research, illuminated by his own life-long and celebrated engagement in the field. Darnell describes how scientists unraveled fundamental questions about the biochemical and genetic importance of RNA. The book is geared towards scientists from the graduate level on up, and will particularly appeal to active investigators in RNA biology, educators of molecular biology and biochemistry, and science historians.

2011, 416 pp., illus., appendix, index

Hardcover \$40

ISBN 978-1-936113-19-4



RNA Worlds: From Life's Origins to Diversity in Gene Regulation

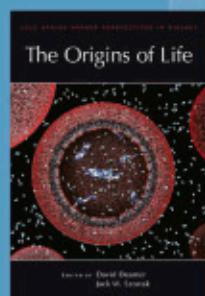
Edited by John F. Atkins, Raymond F. Gesteland, and Thomas R. Cech

This volume reviews the role RNA is thought to have played in the history of life on earth, when it may have preceded DNA as the hereditary material. It also examines the basis for the catalytic activities of RNA both on the early earth and in modern organisms, as well as the recently revealed roles of regulatory RNAs in control of gene expression.

2011, 361 pp., illus. (73 color, 23 b/w), index

Hardcover \$162

ISBN 978-0-879699-46-8



The Origins of Life

Edited by David Deamer and Jack W. Szostak

This book provides a comprehensive account of the environment of the early Earth and describes how the first self-replicating systems emerged from prebiotic chemistry and evolved into primitive cell-like entities.

2010, 318 pp., illus. (47 color, 50 b/w), index

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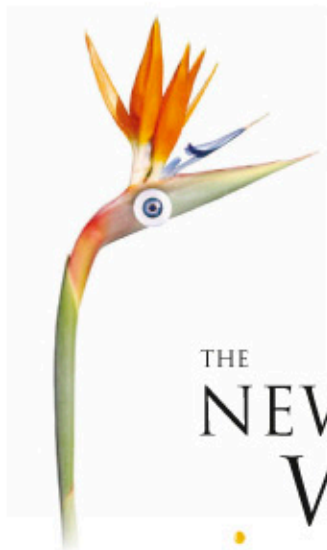
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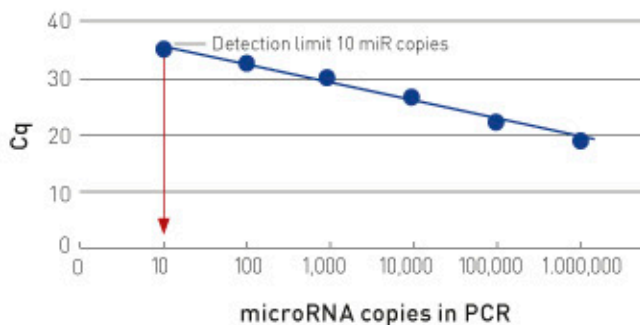


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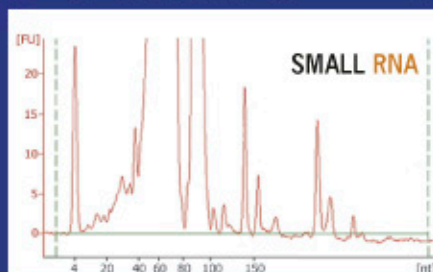
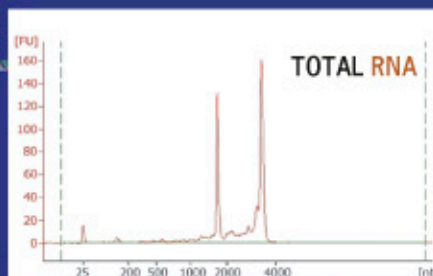
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* Piotr Chomczynski, US patent 2010

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By **Michael R. Green**, Howard Hughes Medical Institute, University of Massachusetts Medical School and **Joseph Sambrook**, Peter MacCallum Cancer Institute, Melbourne, Australia

Molecular Cloning: A Laboratory Manual has always been the one indispensable molecular biology laboratory manual for protocols and techniques. The fourth edition of this classic manual preserves the detail and clarity of previous editions as well as the theoretical and historical underpinnings of the techniques presented. Ten original core chapters reflect developments and innovation in standard techniques and introduce new cutting-edge protocols. Twelve entirely new chapters are devoted to the most exciting current research strategies, including epigenetic analysis, RNA interference, genome sequencing, and bioinformatics. This manual is essential for both the inexperienced and the advanced user.

2012, 2,028 pp., illus., appendices, index
Cloth (three-volume set)
\$475
Paperback (three-volume set)
\$365

ISBN 978-1-936113-41-5

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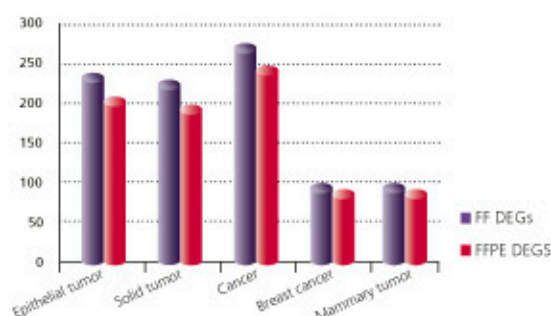
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Judy Lieberman and Howard Y. Chang

Keynote Speakers:

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V. Narry Kim, Seoul National University

Session Topics:

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March 19–24, 2013

Whistler Conference Centre • Whistler, British Columbia
• Canada

Scientific Organizers: David C. Baulcombe and
Irene Bozzoni

Keynote Speaker:

Gary B. Ruvkun, Massachusetts General Hospital, Harvard
Medical School

Session Topics:

*Post-Transcriptional RNA Silencing Pathways in
Diverse Organisms • piRNAs and RNA-Mediated Epigenetic
Modification • Long ncRNA • ncRNA in Development and
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Abstract & Scholarship Deadline: November 15, 2012

Early Registration Deadline: January 18, 2013

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March 20–25, 2013

Eldorado Hotel & Spa • Santa Fe, New Mexico • USA

Scientific Organizers: Robert A. Waterland, David S.
Rosenblatt and Patrick J. Stover

Keynote Speaker:

Stuart Schreiber, Harvard University

Session Topics:

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and Trithorax in Gene Expression and Cancer • Histone
Marks in Development and Cancer • DNA Methylation
in Development and Cancer • Enhancers and ncRNAs in
Development and Cancer • Myc, Transcriptional
Regulation and Development • Transcription, Chromatin
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Early Registration Deadline: January 22, 2013

www.keystonesymposia.org/13C8

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April 28–May 3, 2013

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Massachusetts • USA

Scientific Organizers: Eric J. Snijder and
Ralf Bartenschlager

Keynote Speaker:

Herbert (Skip) W. Virgin IV, Washington University
School of Medicine

Session Topics:

*Innate Immunity: Sensing and Defending • Evolution of
Viruses in the Environment • Systems Biology of +RNA
Virus-Host Interaction • Entry and Assembly • Adaptive
Immunity and Vaccines • RNA Structure and Function •
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Abstract & Scholarship Deadline: December 20, 2012

Early Registration Deadline: February 28, 2013

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Information shown is current as of September 27, 2012 but subject to
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PROTEIN SYNTHESIS AND TRANSLATIONAL CONTROL

Edited by John W.B. Hershey, *University of California, Davis*, Nahum Sonenberg, *McGill University*, Michael B. Mathews, *New Jersey Medical School, University of Medicine and Dentistry of New Jersey*

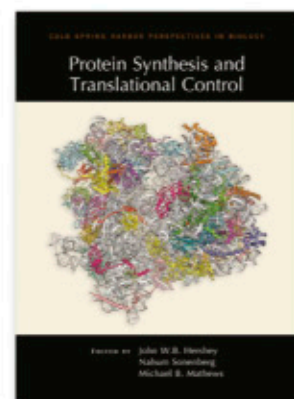
The synthesis of proteins by ribosomes is a fundamental cellular process. Cells must tightly control protein synthesis to maintain homeostasis and regulate proliferation, growth, differentiation, and development. Indeed, aberrant translational control is associated with cancer, several neurologic syndromes, and a group of genetic disorders termed “ribosomopathies.”

Written and edited by experts in the field, this collection from *Cold Spring Harbor Perspectives in Biology* covers our current understanding of all aspects of protein synthesis and its control. The contributors describe the fundamental steps in protein synthesis (initiation, elongation, and termination), the factors involved, and high-resolution structures of translational machinery where this takes place. They review the targets of translational control (e.g., initiation factors, mRNAs, and ribosomes) and how signaling pathways modulate this machinery. The roles of the endoplasmic reticulum, the unfolded protein response, processing bodies (P-bodies), stress granules, and small RNAs are also covered.

This volume includes discussion of translational deregulation in cancer and the development of therapeutic agents that target translation initiation. Thus, it is an essential reference for cell and molecular biologists, as well as cancer biologists and all those investigating human diseases associated with translation dysfunction.

2012, 352 pp., illustrations, index
Hardcover \$135

ISBN 978-1-936113-46-0



CONTENTS

Preface

Principles of Translational Control: An Overview

John W.B. Hershey, Nahum Sonenberg, and Michael B. Mathews

The Structure and Function of the Eukaryotic Ribosome

Daniel N. Wilson and Jamie H. Doudna Cate

The Mechanism of Eukaryotic Translation Initiation: New Insights and Challenges

Alan G. Hinnebusch and Jon R. Lorsch

The Elongation, Termination, and Recycling Phases of Translation in Eukaryotes

Thomas E. Dever and Rachel Green

Single-Molecule Analysis of Translational Dynamics

Alexey Petrou, Jin Chen, Seán O'Leary, Albert Tsai, and Joseph D. Puglisi

The Current Status of Vertebrate Cellular mRNA IRESs

Richard J. Jackson

From Cis-Regulatory Elements to Complex RNPs and Back

Fátima Gebauer, Thomas Preiss, and Matthias W. Hentze

Regulation of mRNA Translation by Signaling Pathways

Philippe P. Roux and Ivan Topisirovic

Protein Secretion and the Endoplasmic Reticulum

Adam M. Benham

New Insights into Translational Regulation in the Endoplasmic Reticulum Unfolded Protein Response

Graham D. Pavitt and David Ron

P-Bodies and Stress Granules: Possible Roles in the Control of Translation and mRNA Degradation

Carolyn J. Decker and Roy Parker

mRNA Localization and Translational Control in

Drosophila Oogenesis

Paul Lasko

Toward a Genome-Wide Landscape of Translational Control

Ola Larsson, Bin Tian, and Nahum Sonenberg

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Jeffrey A. Chao, Young J. Yoon, and Robert H. Singer

A Molecular Link between miRISCs and Deadenylation

Provides New Insight into the Mechanism of Gene

Silencing by MicroRNAs

Joerg E. Braun, Eric Huntzinger, and Elisa Izaurralde

Translational Control in Cancer Etiology

Davide Ruggero

Cytoplasmic RNA-Binding Proteins and the Control of Complex Brain Function

Jennifer C. Darnell and Joel D. Richter

Tinkering with Translation: Protein Synthesis in Virus-Infected Cells

Derek Walsh, Michael B. Mathews, and Ian Mohr

Emerging Therapeutics Targeting mRNA Translation

Abba Malina, John R. Mills, and Jerry Pelletier

Index

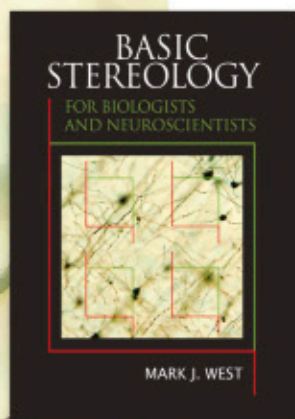
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2012, 206 pp., illus., index
Hardcover \$69

ISBN 978-1-936113-60-6

CONTENTS

Preface

1. Introduction to Stereology

2. Estimating Volume

3. Estimating Object Number

4. Isotropy, iSectors, and Vertical Sections

5. Estimating Length

6. Estimating Surface Area

7. The Precision of an Estimate

8. Systematic versus Random Sampling

9. Getting Started

10. Optimizing the Sampling Scheme:
Amount of Individuals, Sections, and Probes

11. Shrinkage

12. Local Estimators of Size

13. Counting and Measuring
Ultrastructural Features

14. What to Report: Information to Be Included
in Publication

Index

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