

Annual Review of Biochemistry, Vol. 79, 2010. Eds.: Roger D. KORNBERG, Christian R.H. RAETZ, James E. ROTHMAN, Jeremy W. THORNER. Palo Alto California, USA, Annual Reviews, 851 S., ISBN 978-0-8243-0879-7, ISSN 0066-4154.

Der vorliegende Band 79 beginnt mit einem Vorwort von James E. ROTHMAN. Es schließt sich ein einleitender Artikel von Aaron KLUG mit folgendem Titel an: From Virus Structure to Chromatin: X-ray Diffraction to Three-Dimensional Electron Microscopy. Darin beschreibt Aaron KLUG wesentliche Stationen seines persönlichen und wissenschaftlichen Werdeganges.

Weitere Übersichtsartikel zu folgenden Themenbereichen der Biochemie schließen sich an:

Genomic Screening with RNAi: Results and Challenges (Stephanie MOHR, Chris BAKAL, Norbert PERRIMON); Nanomaterials Based on DNA (Nadrian C. SEEMAN); Eukaryotic Chromosome DNA Replication: Where, When, and How? (Hisao MASAI, Seiji MATSUMOTO, Zhiying YOU, Naoko YOSHIZAWA-SUGATA, Masako ODA); Regulators of the Cohesin Network (Bo XIONG, Jennifer L. GERTON); Reversal of Histone Methylation: Biochemical and Molecular Mechanisms of Histone Demethylases (Nima MOSAMMAPARAST, Yang SHI); The Mechanism of Double-Strand DNA Break Repair by the Nonhomologous DNA End-Joining Pathway (Michael R. LIEBER); The Discovery of Zinc Fingers and Their Applications in Gene Regulation and Genome Manipulation (Aaron KLUG); Origins of Specificity in Protein-DNA Recognition (Remo ROHS, Xiangshu JIN, Sean M. WEST, Rohit JOSHI, Barry HONIG, Richard S. MANN); Transcript Elongation by RNA Polymerase II (Luke A. SELTH, Stelan SIGURDSSON, Jesper Q. SVEJSTRUP); Biochemical Principles of Small RNA Pathways (Qinghua LIU, Zain PAROO); Functions and Regulation of RNA Editing by ADAR Deaminases (Kazuko NISHIKURA); Regulation of mRNA Translation and Stability by microRNAs (Marc Robert FABIAN, Nahum SONENBERG, Witold FILIPOWICZ); Structure and Dynamics of a Processive Brownian Motor: The Translating

Ribosome (Joachim FRANK, Ruben L. GONZALEZ, Jr.); Adding New Chemistries to the Genetic Code (Chang C. LIU, Peter G. SCHULTZ); Bacterial Nitric Oxide Synthases (Brian R. CRANE, Jawahar SUDHAMSU, Bhunit A. PATEL); Enzyme Promiscuity: A Mechanistic and Evolutionary Perspective (Olga KHERSONSKY, Dan S. TAWFIK); Hydrogenases from Methanogenic Archaea, Nickel, a Novel Cofactor, and H₂ Storage (Rudolf K. THAUER, Anne-Kristin KASTER, Meike GOENRICH, Michael SCHICK, Takeshi HIROMOTO, Seigo SHIMA); Copper Metallochaperones (Nigel J. ROBINSON, Dennis R. WINGE); High-Throughput Metabolic Engineering: Advances in Small-Molecule Screening and Selection (Jeffrey A. DIETRICH, Adrienne E. MCKEE, Jay D. KEASLING); Botulinum Neurotoxin: A Marvel of Protein Design (Mauricio MONTAL); Chemical Approaches to Glycobiology (Laura L. KIESSLING, Rebecca A. SPLAIN); Cellulosomes: Highly Efficient Nanomachines Designed to Deconstruct Plant Cell Wall Complex Carbohydrates (Carlos M.G.A. FONTES, Harry J. GILBERT); Somatic Mitochondrial DNA Mutations in Mammalian Aging (Nils-Göran LARSSON); Physical Mechanisms of Signal Integration by WASP Family Proteins (Shae B. PADRICK, Michael K. ROSEN); Amphipols, Nanodiscs, and Fluorinated Surfactants: Three Nonconventional Approaches to Studying Membrane Proteins in Aqueous Solutions (Jean-Luc POPOT); Protein Sorting Receptors in the Early Secretory Pathway (Julia DANCOURT, Charles BARLOWE); Virus Entry by Endocytosis (Jason MERCER, Mario SCHELHAAS, Ari HELENIUS).

Ein Autorenindex für die Bände 75 bis 79 ergänzt den vorliegenden Band. Außerdem ist ein kumulierender Index der Themengebiete für die Bände 75 bis 79 angefügt. Somit ist der Band 79 des Annual Review of Biochemistry – wie die vorhergehenden – eine umfassende Informationsquelle biochemischer Literatur. Außerdem ist der Band 79 unter <http://biochem.annualreviews.org> online verfügbar.

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