

Jie-Oh LEE); Structure-Function Relationships of the G Domain, a Canonical Switch Motif (Alfred WITTINGHOFER, Ingrid R. VETTER); STIM Proteins and the Endoplasmic Reticulum-Plasma Membrane Junctions (Silvia CARRASCO, Tobias MEYER); Amino Acid Signaling in TOR Activation (Joungmok KIM, Kun-Liang GUAN); Mitochondrial tRNA Import and Its Consequences for Mitochondrial Translation (André SCHNEIDER); Caspase Substrates and Cellular Remodeling (Emily D. CRAWFORD, James A. WELLS); Regulation of HSF1 Function in the Heat Stress Response: Implications in Aging and Disease (Julius ANCKAR, Lea SISTONEN).

Ein Autorenindex für die Bände 76 bis 80 ergänzt den vorliegenden Band. Außerdem ist ein kumulierender Index der Themengebiete für die Bände 76 bis 80 angefügt. Somit ist der Band 80 des Annual Review of Biochemistry – wie die vorhergehenden – eine wertvolle Informationsquelle biochemischer Literatur. Außerdem ist der Band online unter <http://biochem.annualreviews.org> verfügbar.

Annual Review of Biochemistry, Vol. 81, 2012. Eds.: Roger D. KORNBERG, James E. ROTHMAN, JoAnne STUBBE, Jeremy W. THORNER. Palo Alto Calif., USA, Annual Reviews, 838 S., ISBN 978-0-8243-0881-0, ISSN 0066-4154.

Der vorliegende Band 81 beginnt mit einem Vorwort von JoAnne STUBBE: „Preface and Dedication to Christian R.H. Raetz“, es folgen einleitende Artikel von Walter NEUPERT: „A Mitochondrial Odyssey“ und von Gottfried SCHATZ: „The Fires of Life“.

Weitere Übersichtsartikel zu folgenden Themenbereichen der Biochemie schließen sich an:

Chromatin, Epigenetics, and Transcription Theme

Introduction to Theme „Chromatin, Epigenetics, and Transcription“ (Joan W. CONAWAY); The COMPASS Family of Histone H3K4 Methylases: Mechanisms of Regulation in Development and Disease Pathogenesis (Ali SHILATIFARD); Programming of DNA Methylation Patterns (Howard CEDAR, Yehudit BERGMAN); RNA Polymerase II Elongation Control (Qiang ZHOU, Tiandao LI, David H. PRICE); Genome Regulation by Long Noncoding RNAs (John L. RINN, Howard Y. CHANG).

Protein Tagging Theme

The Ubiquitin System, an Immense Realm (Alexander VARSHAVSKY); Ubiquitin and Proteasomes in Transcription (Fuqiang GENG, Sabine WENZEL, William P. TANSEY); The Ubiquitin Code (David KOMANDER, Michael RAPE); Ubiquitin and Membrane Protein Turnover: From Cradle to Grave (Jason A. MACGURN, Pi-Chiang HSU, Scott D. EMR); The N-End Rule Pathway (Takafumi TASAKI, Shashikanth M. SRIRAM, Kyong Soo PARK, Yong Tae KWON); Ubiquitin-Binding Proteins: Decoders of Ubiquitin-Mediated Cellular Functions (Koraljka HUSNJAK, Ivan DIKIC); Ubiquitin-Like Proteins (Annemarie G. VAN DER VEEN, Hidde L. PLOEGH).

Recent Advances in Biochemistry

Toward the Single-Hour High-Quality Genome (Patrik L. STÄHL, Joakim LUNDEBERG); Mass Spectrometry-Based Proteomics and Network Biology (Ariel BENSIMON, Albert J.R. HECK, Ruedi AEBERSOLD); Membrane Fission: The Biogenesis of Transport Carriers (Felix CAMPELO, Vivek MALHOTRA); Emerging Paradigms for Complex Iron-Sulfur Cofactor Assembly and Insertion (John W. PETERS, Joan B. BRODERICK); Structural Perspective of Peptidoglycan Biosynthesis and Assembly (Andrew L. LOVERING,

Susan S. SAFADI, Natalie C.J. STRYNADKA); Discovery, Biosynthesis, and Engineering of Lantipeptides (Patrick J. KNERR, Wilfred A. VAN DER DONK); Regulation of Glucose Transporter Translocation in Health and Diabetes (Jonathan S. BOGAN); Structure and Regulation of Soluble Guanylate Cyclase (Emily R. DERBYSHIRE, Michael A. MARLETTA); The MPS1 Family of Protein Kinases (Xuedong LIU, Mark WINEY); The Structural Basis for Control of Eukaryotic Protein Kinases (Jane A. ENDICOTT, Martin E.M. NOBLE, Louise N. JOHNSON); Measurements and Implications of the Membrane Dipole Potential (Liguo WANG); GTPase Networks in Membrane Traffic (Emi MIZUNO-YAMASAKI, Felix RIVERA-MOLINA, Peter NOVICK); Roles for Actin Assembly in Endocytosis (Olivia L. MOOREN, Brian J. GALLETTA, John A. COOPER); Lipid Droplets and Cellular Lipid Metabolism (Tobias C. WALTHER, Robert V. FARESE JR.); Adipogenesis: From Stem Cell to Adipocyte (Qi Qun TANG, M. Daniel LANE); Pluripotency and Nuclear Reprogramming (Marion DEJOSEZ, Thomas P. ZWAKA); Endoplasmic Reticulum Stress and Type 2 Diabetes (Sung Hoon BACK, Randal J. KAUFMAN); Structure Unifies the Viral Universe (Nicola G.A. ABRESCIA, Dennis H. BAMFORD, Jonathan M. GRIMES, David I. STUART).

Ein Autorenindex und ein Verzeichnis der Themengebiete für die Bände 77 bis 81 ergänzen den vorliegenden Band. Auch Band 81 des Annual Review of Biochemistry ist online unter <http://biochem.annualreviews.org> verfügbar.

Annual Review of Biochemistry, Vol. 82, 2013. Eds.: Roger D. KORNBERG, James E. ROTHMAN, JoAnne STUBBE, Jeremy W. THORNER. Palo Alto Calif., USA, Annual Reviews, 814 S., ISBN 978-0-8243-0882-7, ISSN 0066-4154.

Band 82 beginnt mit einem einleitenden Artikel zu Ehren des verstorbenen Wissenschaftlers Professor Christian RAETZ mit dem Titel: „Christian Raetz: Scientist and Friend Extraordinaire“ (William DOWHAN, Hiroshi NIKAIDO, JoAnne STUBBE, John W. KOZARICH, William T. WICKNER, David W. RUSSELL, Teresa A. GARRETT, Kathryn BROZEK, Paul MODRICH).

Weitere Übersichtsartikel zu folgenden Themenbereichen der Biochemie schließen sich an:

Mechanisms for Initiating Cellular DNA Replication (Alessandro COSTA, Iris V. HOOD, James M. BERGER); The Chromatin Response to DNA Breaks: Leaving a Mark on Genome Integrity (Godelieve SMEENK, Haico VAN ATTIKUM); Readout of Epigenetic Modifications (Dinshaw J. PATEL, Zhanxin WANG); Flap Endonuclease 1 (Lata BALAKRISHNAN, Robert A. BAMBARA); New Mechanistic and Functional Insights into DNA Topoisomerases (Stefanie HARTMAN CHEN, Nei-Li CHAN, Tao-shih HSIEH); Arrest Peptides: Cis-Acting Modulators of Translation (Koreaki ITO, Shinobu CHIBA); Structural Basis of the Translational Elongation Cycle (Rebecca M. VOORHEES, V. RAMAKRISHNAN); CRISPR-Mediated Adaptive Immune Systems in Bacteria and Archaea (Rotem SOREK, C. Martin LAWRENCE, Blake WIEDENHEFT); Correlating Structure and Energetics in Protein-Ligand Interactions: Paradigms and Paradoxes (Stephen F. MARTIN, John H. CLEMENTS); Extracellular Chaperones and Proteostasis (Amy R. WYATT, Justin J. YERBURY, Heath ECROYD, Mark R. WILSON); Molecular Chaperone Functions in Protein Folding and Proteostasis (Yujin E. KIM, Mark S. HIPPEL, Andreas BRACHER, Manajit HAYER-HARTL, F. Ulrich HARTL); SUMOylation: A Regulatory Protein Modification in Health and Disease (Annette FLOTHO, Frauke MELCHIOR); Ubiquitin Ligases and Cell Cycle Control (Leonardo K. TEIXEIRA, Steven I. REED);