

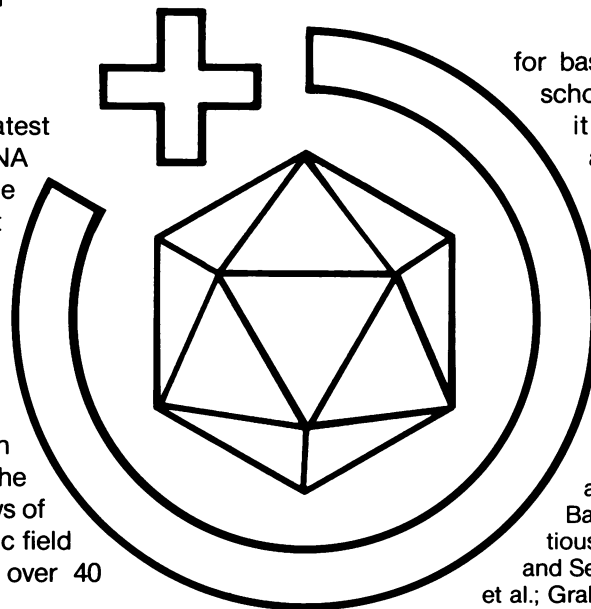
THE LATEST INFORMATION ON SOME VIRUS "SUPERFAMILIES" — NEW ASPECTS OF POSITIVE-STRAND RNA VIRUSES

EDITED BY MARGO A. BRINTON
AND FRANZ X. HEINZ

THIS BOOK presents the latest thinking on positive-strand RNA viruses. These include the majority of plant viruses, insect viruses, and animal viruses, including picornavirus, coronavirus, togavirus, flavivirus, poliovirus, and rhinovirus. Arising from the 2nd International Symposium on Positive-Strand RNA Viruses, held in Vienna, Austria, in June 1989, the book is a compendium of reviews of exciting research in this dynamic field currently being performed at over 40 laboratories.

At one time considered divergent in structure, the viruses of the sindbis, polio, and coronavirus superfamilies are increasingly known to share important similarities which allow them to shuffle conserved amino acid units to form new viruses. The implications for plant, animal, and human viral studies, including vaccine and antiviral-compound development, are serious. In addition, the book gives new insight into the diversity of the structure of picornaviruses. The first animal viruses to be crystallized, the picornaviruses have had enormous influence on subsequent discussions of viral structure. Several color plates illustrate the structural projections of these viruses and add to the book's overall usefulness.

The book will be valued both as an update for virologists, molecular biologists, viral immunologists, medical virologists, and researchers in vaccine development and antiviral compounds and as supplemental reading



for basic virology courses in medical schools and universities. In addition, it is highly recommended for advanced courses in positive-strand RNA virology.

Condensed Contents

Overview: Positive-Stranded RNA Viruses: Early History and the Role of Model Viruses (Kaesberg)

I. Viral Evolution (7 chapters by Goldbach; Spaan et al.; Taylor et al.; Meyers et al.; Dolja et al.; Godeny et al.; and Wright and Cotton.) II. Genome Replication (5 chapters by Hall et al.; Flanagan et al.; Strauss et al.; Leibowitz et al.; and Barton et al.) III. DI-RNAs and Infectious Clones (7 chapters by Giachetti and Semler; Hagino-Yamagishi et al.; Siegl et al.; Grakoui et al.; Wellink et al.; Morris and

Knorr; and Roos et al.) IV. Protein Translation, Cleavage, and Modification (10 chapters by Reuer et al.; Howell et al.; Macejak et al.; Simons et al.; Garoff et al.; Parks et al.; Skern et al.; Falk et al.; Feng et al.; and Falgout and Lai.) V. Virion Structure and Assembly (6 chapters by Hogle et al.; Acharya et al.; Chen et al.; Wengler; Schlesinger et al.; and Kirkegaard and Compton.) VI. Viral Receptors, Uptake, and Disassembly (6 chapters by Holmes et al.; Colonno et al.; McClelland and Greve; Merluzzi et al.; Hsu et al.; and Racaniello et al.) VII. Antigenic Structure and Functions (4 chapters by Siddell et al.; Heinz et al.; Kurane et al.; and Strauss et al.) VIII. Molecular Aspects of Pathogenesis and Virulence (5 chapters by Agol; Girard et al.; Calenoff et al.; Johnston et al.; and Kandolf et al.) IX. Strategies for Control of Virus Disease (4 chapters by Baulcombe et al.; Kew et al.; McKinlay et al.; and Andries et al.)

X. Strategies for Control of Virus Disease (4 chapters by Baulcombe et al.; Kew et al.; McKinlay et al.; and Andries et al.)

Ordering Information

June 1990, hardcover (ISBN 1-55581-022-5), 405 pages, illustrated, color plates, index. Member: \$59.00; Nonmember: \$75.00. To order, complete the form below and mail to ASM. Institutional purchase order forms should include the order number below. Credit card orders for ASM books may also be placed by phone (202-737-3600) or by fax (202-737-0368).

Yes, send me _____ copy(ies) of *New Aspects of Positive-Strand RNA Viruses* at \$59.00 (Member); \$75.00 (Nonmember) each, order number MCB 5/91 -022-5.

If ordering at member price, give member number: _____

Check one:

Payment enclosed

MasterCard VISA American Express

Card Number _____ Expires _____

Signature _____ Date _____

Please print or type mailing information:

Name _____

Address _____

City _____

State/Province _____ Zip/Postal Code _____

Country _____



Publication Sales/American Society for Microbiology

1325 Massachusetts Ave., N.W., Washington, DC 20005-4171

CHAIRPERSON

Department of Human Genetics

Allegheny-Singer Research Institute (ASRI) is seeking a qualified individual for the position of Chairperson of the Department of Human Genetics. ASRI is part of the Allegheny System—a major academic health system—which includes Allegheny Health Services (the non-profit parent corporation), Allegheny General Hospital (AGH), The Medical College of Pennsylvania (MCP), Allegheny Neuropsychiatric Institute (ANI), and Allegheny Health Foundation (AHF).

Responsibilities of the position include the establishment and direction of a Department of Human Genetics capable of achieving national prominence; fostering and overseeing the development of clinically relevant, independent and collaborative interdisciplinary research projects capable of competing for peer-reviewed, extramural funding; attracting a critical mass of productive researchers for the department; and the development of strategies to carry out the long-term mission to advance the clinical capabilities of AGH through early clinical application of research findings.

Eligible applicants should have a doctoral or equivalent degree and demonstrated accomplishments to qualify as a full professor at the Medical College of Pennsylvania, a minimum of five years of experience either directing or assisting with the direction of significant research in genetics, and demonstrated research credentials.

Interested candidates should apply by submitting a curriculum vitae to **Dr. Leonard L. Ross, Annenberg Dean, The Medical College of Pennsylvania, c/o Allegheny Campus, 320 East North Avenue, Pittsburgh, PA 15212.** An Equal Opportunity Employer.



ALLEGHENY-SINGER
RESEARCH INSTITUTE

INFECTIOUS DISEASE CLINICIAN

Infectious Disease physician is seeking a BE/BC ID clinician as a third member of an active 100% ID practice. Opportunity for a clinical appointment at University of Illinois College of Medicine and to teach medical students and residents. Position offers opportunity for developing clinical research and Infection Control activities.

Located less than three hours from Chicago and St. Louis, Peoria is an "All-American City" with a referral base of 350,000 and offers numerous sports, cultural and recreational activities.

Position offers an excellent salary and benefit package and an early partnership, and is available now. Submit CV to:

Harvey Lightbody
Vice President of Physician Recruitment
Methodist Health Services Corporation

Suite 300
221 N.E. Glen Oak Avenue
Peoria, IL 61636
(309) 672-4864

equal opportunity employer

Osteosarcoma Research Conference - 1991
October 16 to 18, 1991

Sponsored by

Allegheny-Singer Research Institute
Allegheny General Hospital
Pittsburgh, Pennsylvania

Venue

George J. Magovern, M.D., Conference Center
Allegheny General Hospital
320 East North Avenue
Pittsburgh, Pennsylvania

Sessions

Clinical Treatment/Experimental Models
Pathology/Cell Biology
Biochemistry/Immunology
Molecular Biology/Genetics
Endocrinology/Growth Factors

To obtain requests for registration, accommodations and abstract forms, please contact:

Continuing Medical Education
Allegheny General Hospital
320 East North Avenue
Pittsburgh, Pennsylvania 15212-9986
(412) 359-4952



ALLEGHENY GENERAL HOSPITAL



ALLEGHENY-SINGER
RESEARCH INSTITUTE

ADP-Ribosylating Toxins and G Proteins

Insights into Signal Transduction

Edited by **Joel Moss** and **Martha Vaughan**, *National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, Maryland*

The contents of this important synthesis and the expert contributors span the disciplines of microbiology, biochemistry, molecular biology, and pharmacology to review current knowledge about ADP-ribosylating toxins, guanine nucleotide-binding proteins, receptors, and signal transduction. Recombinant DNA technology has been applied to elucidate the molecular basis of action of these bacterial toxins, which are responsible in part for the syndromes characteristic of a number of infectious diseases.

This book will very effectively update interested scientists and students on the current status of research into ADP-ribosylating toxins and related topics and will point the way for future advances.

CONDENSED CONTENTS

I. Bacterial ADP-Ribosyltransferases: Toxins and Related Proteins (9 chapters by Collier, Bodley and Veldman, Wick and Iglewski, Ui, Aktories and Just, Aktories et al., Mekalanos and DiRita, Fishman, and Murphy and Strom)

II. Guanine Nucleotide-Binding Proteins Coupled to Signal Transduction in Animal Cells (13 chapters by Raymond et al., Kaziro, Spiegel, Birnbaumer et al., De Vivo and Gershengorn, Snyderman et al., Serventi et al., Manning, Gautam and Simon, Gibbs et al., Price et al., Takai et al., and Boback et al.)

III. ADP Ribosylation in Bacteria and Animal Cells (6 chapters by Lowery and Ludden, Jacobson et al., Williamson and Moss, Iglewski and Fendrick, Ueda, and Miwa and Sugimura)

Hardcover (ISBN 1-55581-017-9)
March 1990

585 pages, illustrated, color plate, index

To order, complete the form below and mail to ASM. Institutional purchase order forms should include the catalog number below. Credit card orders for ASM books may also be placed by phone (202-737-3600) or by fax (202-737-0368).

Please send me **ADP-Ribosylating Toxins and G Proteins** (catalog number MCB 5/91-017-9).

Check payment method

- Payment enclosed
 MasterCard Card number: _____
 Visa Expiration date: _____
 American Express Signature: _____

Check price	Quantity	Total cost
<input type="checkbox"/> Member: \$69.00 × _____ = \$ _____		
<input type="checkbox"/> Nonmember: \$79.00 × _____ = \$ _____		

If ordering at member price, give member number: _____

Please print or type mailing information

Name _____
Address _____
City _____ State/Province _____
Zip/Postal code _____ Country _____

Send to:

ASM

Publication Sales
American Society for Microbiology
1325 Massachusetts Avenue, N.W.
Washington, DC 20005

An elegant view of a complex macromolecule . . .

THE RIBOSOME

STRUCTURE, FUNCTION, & EVOLUTION

Edited by **Walter E. Hill**, *University of Montana, Missoula*; **Albert Dahlberg**, *Brown University, Providence, R.I.*; **Roger A. Garrett**, *University of Copenhagen, Copenhagen, Denmark*; **Peter B. Moore**, *Yale University, New Haven, Conn.*; **David Schlessinger**, *Washington University School of Medicine, St. Louis, Mo.*; and **Jonathan R. Warner**, *Albert Einstein College of Medicine, Bronx, N.Y.*

This comprehensive overview is a major new addition to literature on the ribosome, covering the structure, function, and evolution of this complex macromolecule in both procaryotic and eucaryotic systems. The authors, an international group of leading experts representing 13 countries, have written and illustrated their chapters for use by all life scientists, including those outside the field.

The book opens with a personal, historical retrospective and summary by Masayasu Nomura, followed by historical insights on ribosome preparation by Alexander S. Spirin. From there, chapters turn to recent developments in every arena of research into the ribosome. Much of the current knowledge about the detailed mechanisms by which the ribosome is involved in protein biosynthesis has only recently been delineated thanks to a host of new research techniques. Additional information about how antibiotics and ribosomes interact and a view of the ribosome in its evolutionary context are also included.

Arising from the August 1989 International Conference on Ribosomes, this reference will be extremely useful to advanced students as well as investigators whose work either directly or indirectly touches on this subject.

CONDENSED CONTENTS

Historical (2 chapters by Nomura and Spirin). **Structure of Ribosomes and rRNA** (12 chapters by Noller et al.; Brimacombe et al.; Frank et al.; Boublik, Mandiyan, and Tumminia; Stöffler-Meilicke and Stöffler; Yonath et al.; Ehresmann et al.; Draper; Egebjerg, Larsen, and Garrett; Oakes et al.; Serdyuk et al.; and Wool et al.). **Probing rRNA Function** (4 chapters by Raué et al.; Tapprich et al.; Cunningham et al.; and Hill et al.). **Initiation** (5 chapters by Van Knippenberg; Hartz, McPheeters, and Gold; Gualerzi et al.; Merrick; and Munroe and Jacobson). **Elongation** (8 chapters by Liljas; Rheinberger et al.; Zimmermann, Thomas, and Wower; Wintermeyer, Lill, and Robertson; Barta, Kuechler, and Steiner; Hardesty, Odom, and Czworkowski; Ehrenberg et al.; and Möller). **Termination** (2 chapters by Tate, Brown, and Kastner and Murgola et al.). **Ribosome Formation** (7 chapters by Nilsson et al.; Pace and Burgin; Srivastava and Schlessinger; Musters et al.; Warner et al.; Gerbi et al.; and Ware and Khanna-Gupta). **Antibiotic Mechanisms and Probes**

(3 chapters by Cundliffe; Cooperman, Weitzmann, and Fernández; and Ballesta and Lazaro). **Translational Fidelity** (6 chapters by Kurland et al.; Dix, Thomas, and Thompson; Weiss et al.; Buckingham et al.; Bogosian et al.; and Culbertson et al.). **Evolution of Ribosomes** (8 chapters by Gouy and Li; Lake; Gray and Schnare; Wittmann-Liebold et al.; Matheson et al.; Finley, Bartel, and Varshavsky; Amils et al.; and Subramanian, Smooker, and Giese).

August 1990

Hardcover (ISBN 1-55581-020-9)

696 pages, large format, illustrated, color plates, index

To order, complete the form below and mail to ASM. Institutional purchase orders should include the offer number below. Credit card orders for ASM books may also be placed by phone (202-737-3600) or by fax (202-737-0368).

Please send me _____ copy(ies) of *The Ribosome* at
 \$87.00 (Member) / \$104.00 (Nonmember) per copy (offer number MCB 5/91 -020-9).

Member number (if applicable) _____

Check payment method:

Check enclosed

MasterCard

VISA

American Express

Card Number _____ Expires _____

Signature _____ Date _____

Complete shipping information

Name _____

Address _____

City/State/Zip or Postal code _____

Country _____

Send to:

ASM

Publication Sales

American Society for Microbiology
1325 Massachusetts Avenue, N.W.
Washington, DC 20005-4171