Contents, Vol. 1, 1983

Editor-in-Chief
J.M. Cruse, Jackson, Miss.

Topic Editors
Inflammation and Repair
J. Hayes, Boston, Mass.
Pulmonary Diseases
R.E. Lewis, Jr., Jackson, Miss.
Coordinating Editor
H.Z. Movat, Toronto

Atherosclerosis
J. Hayes, Boston, Mass.
Cardiovascular Diseases
R.E. Lewis, Jr., Jackson, Miss.

Advisory Editors
R.M. O’Neal, Jackson, Miss.
C. Haudenschild, Boston, Mass.
M.M. Azar, Minneapolis, Minn.

Carcinogenesis and Cellular Injury
S. Azar, Minneapolis, Minn.
D. Kaufman, Chapel Hill, N.C.
H.S. Rosenberg, Houston, Tex.
A.B. Jenson, Washington, D.C.

Congenital Disorders
L.M. Schwartz, East Orange, N.J.

Carcinogenesis
E. Farber, Toronto

Metabolic and Endocrine Disorders
P. Heitz, Basel

Tumor Virolology

Toxicology
W.H. Kirsten, Chicago, Ill.

Tumor Cell Biology

Reticuloendothelial System
R.C. Gallo, Bethesda, Md.

Pathophysiology

Natural Killer Cells and Tumor
Immunochemistry of Human Host Defense Mechanisms

Carcinomata
A.C. Issekutz, Halifax
G.F. Springer, Evanston, Ill.
R. Bortolussi, Halifax

Neoplasia
Cytopathology

W.W. Johnson, Jackson, Miss.
S.D. Greenberg, Houston, Tex.

Pathogenesis of Infection
Nutrition

P. Bonventre, Cincinnati, Ohio
R.B. McGandy, Boston, Mass.

Immunopathology
Clinical Pathology Reviews

M. Ginsberg, La Jolla, Calif. R. Ulevitch, La Jolla, Calif.
Hemostasis and Thrombosis
F.B. Taylor, Jr., Oklahoma City, Okla.
Cellular Injury, Ischemia and Shock B.F. Trump, Baltimore, Md.
Degenerative Neurologic Disorders W.H. Murphy, Ann Arbor, Mich.
H. Rochman, Chicago, Ill.

Drug Dosage
The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the
constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All
All rights reserved.
No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher or, in the case of photocopying, direct payment of a specified fee to the Copyright Clearance Center (see ‘Information for Readers and Subscribers’).

© Copyright 1983 by S. Karger AG, P.O. Box, CH-4009 Basel (Switzerland) Printed in Switzerland by Thür AG Offsetdruck, Pratteln

Contents Vol. 1, 1983
No. 1  General Editorial
Survey and Synthesis of Pathology Research: Prospectus
Cruse, J.M 1
Interpretive Reviews
Endothelial and Smooth Muscle Cell Migration in the Repair of the Injured Vessel Wall
Gotlieb, A.I 5
Current Status and Perspective of Natural Killer Cell Research
Herberman, R.B 23
Mediators Involved in the Expression of Endotoxic Activity
Mathison, J.C.; Ulevitch, R.J 34
The Cell Cycle and Chemical Carcinogenesis
Spontaneous Amyloidosis in Outbred CD-1 Mice
Conner, M.W.; Conner, B.H.; Fox, J.G.; Rogers, A.E 67
Mechanisms in Neovascularization: Sprouting
Makarski, J.S., Jr 79
Symposium (Part I)
In vivo Quantitation of the Inflammatory Reaction and Related Phenomena. Introductory Remarks
Movat, H.Z 87
Quantitation of Acute Inflammation in the Skin: Recent Methodological Advances and Their Application to the Study of Inflammatory Reactions
Issekutz, A.C 89
Potential Role of the Lymphatic Vessel in Regulating Inflammatory Events
Johnston, M.G 111
History of Pathology
Leukocyte Emigration – A Brief Historical Review: 1843-1982
Movat, H.Z 120
Editor’s Column
A New First-Generation Hybrid Syrian Hamster, BIO FID Alexander for in vivo Carcinogenesis Bioassay, as a Third Species or to Replace the Mouse
Homburger, F.; Adams, R.A.; Bernfeld, P.; Van Dongen, C.G.; Soto, E 125
Discussion on Methodology

Pitfalls and Caveats in the Methodology for Immunoperoxidase Staining in Surgical Pathology Diagnosis (with 1 color plate)

Lewis, R.E., Jr.; Johnson, W.W.; Cruse, J.M 134

Contents

No. 3-4 Interpretive Reviews

Platelet-Derived Growth Factor. Structural and Functional Aspects

Human Tissues and Cells in Biomedical Research
Harris, C.C.; Trump, B.F 165

Phagocytosis – A Model for Analysis of Cytoskeletal-Membrane Interactions
Painter, R.G 172

Pathogenesis of Multiple Sclerosis: Implications Based on Its Multifactorial Etiology
Murphy, W.H 186

Role of Macrophages in the Elimination of Anti-Fetal Antibody during Its Transport through the Human Placenta
Wood, G.W 196

Symposium (Part II)

Application of 51Cr-Labelled PMN Leukocytes in Quantitating PMN Kinetics in Systemic and Local Inflammatory Mediated Processes. Effects of Endotoxin, Complement and Interleukin I
Cybulsky, M.I.; Movat, H.Z 208

Lymphocyte Migration in Cellular Hypersensitivity and Chronic Granulomatous Inflammation
Hay, J.B 229

The Local Shwartzman Phenomenon. An Experimental Model for Microcirculatory Injury Induced by Endotoxin
Movat, H.Z 241

Editor’s Column

Survey and New Description of the Hemostasis System
Taylor, F.B., Jr 251

Clinical Pathology Review

Inherited Abnormalities of Platelet Glycoproteins
Caen, J.P.; Nurden, A.T 274

Discussion on Methodology

Advances in Protein Analysis of Biological Systems
Fosslien, E.; Stastny, J.; Yamashiroya, H 282

Author Index 291