CONTENTS

No. 1 (January)

L2C Guinea Pig Lymphatic Leukemia: A “B” Cell Leukemia
E. M. Shevach, L. Ellman, J. M. Davie, and I. Green 1

δ-Aminolevulinic Acid Synthetase Activity in Human Plasma: Relation
to Erythropoiesis and Evidence of Induction in Erythropoietic
Porphyria .......................... Ken Miyagi and C. J. Watson 13

Congenital Dyserythropoietic Anemia Type II: Ultrastructural and Radio-
autographic Studies of Blood and Bone Marrow
Kwan Yuen Wong, George Hug, and Beatrice C. Lampkin 23

Erythropoietin Production in the Anephric Rat. I. Relationship Between
Nephrectomy, Time of Hypoxic Exposure, and Erythropoietin Pro-
duction ......................... J. C. Schooley and L. J. Mahlmann 31

Turnover Rate of Normal Blood Lymphocytes and Exchangeable Pool Size
in Man, Calculated From Analysis of Chromosomal Aberrations Sus-
tained During Extracorporeal Irradiation of the Blood
E. O. Field, H. B. A. Sharpe, K. B. Dawson,
V. Andersen, S. A. Killmann, and E. Weeke 39

Familial Immunopathy With Chromosomal and Functional Abnormalities
of Lymphocytes ............... Ulrich W. Jehn and Robert S. Schwartz 57

Bactericidal and Metabolic Properties of Human Eosinophils

Fine Structure of the Red Pulp of the Spleen in Hereditary Spherocytosis
Zelma Molnar and Henry Rappaport 81
An Electron Microscopic Study of the Bone Marrow of the Rat in an Experimental Myelogenous Leukemia  
Li-Tsun Chen, Evelyn E. Handler, Eugene S. Handler, and Leon Weiss  
95

Changes in Blood Lymphocyte Cytoplasmic Refractive Index Following Skin Grafting in Rabbits .............S. Laaveg and W. K. Metcalf 113


SPECIAL DEPARTMENTS

Abstracts ........................................................................................................................................ 138

Correspondence: Sea-Blue Histiocytes ............................................................................................ 148

News and Views .................................................................................................................................. 152

No. 2 (February)

Fetal Lymphocytes in the Maternal Blood ............... Jim Schröder and Albert de la Chapelle 153

Leukapheresis Therapy of Chronic Lymphocytic Leukemia  
J. E. Curtis, E. M. Hersh, and E. J. Freireich 163

Variability of Proliferative Patterns in Acute Lymphoid Leukemia of Children ....... Hans P. Wagner, Hans Cottier, and Eugene P. Cronkite 176

Thrombocytopenia Due to Abnormalities in Platelet Release Reaction—Studies on Six Unrelated Patients ... Harvey J. Weiss and John Rogers 187

Further Evidence for a Deficient Storage Pool of Adenine Nucleotides in Platelets From Some Patients With Thrombocytopenia—“Storage Pool Disease” ........... Holm Holmsen and Harvey J. Weiss 197

Inhibition of Fibrin Monomer Polymerization by Lambda Myeloma Globulins ................. Morton Coleman, Edward M. Vigliano, Marc E. Weksler, and Ralph L. Nachman 210

IgA Pyroglobulin, Hyperviscosity Syndrome and Coagulation Abnormality in a Patient with Multiple Myeloma .... Susumu Sugai 224

Hemopoiesis in Pituitary Dwarfs Treated With Human Growth Hormone and Testosterone ............... J. H. Jepson and E. E. McGarry 238

Radioautographic Study of Cellular Migration Using Parabiotic Rats  
Ruth W. Tyler and N. B. Everett 249

Bone Formation by Hemopoietic Tissue: Separation of Preosteoblast From Hemopoietic Stem Cell Function in the Rat .... Sheldon Amsel and Elisabeth S. Dell 267
Serum Requirement for Apoferritin Induction in Rat Liver Slices
Lester Smith and R. A. Fineberg 274

Editorial: The Diagnosis of Von Willebrand's Disease
Edmund A. Murphy and Edwin W. Salzman 284

SPECIAL DEPARTMENTS

Abstracts ....................................................... 288
News and Views .............................................. 299

No. 3 (March)

Alteration of the Cell Periphery During Granulocyte Maturation: Relationship to Cell Function .......... Marshall A. Lichtman and Robert I. Weed 301

Granulopoiesis During Myleran-induced Suppression of Transplantable Hematopoietic Stem Cells ........ K. B. Udupa, H. Okamura, and K. R. Reissmann 317

Identification of the Bone Marrow Colony Mononuclear Phagocyte as a Macrophage .......... Martin J. Cline, Noel L. Warner, and Donald Metcalf 326

Origin and Recovery of Colony-forming Units in Locally Curetted Bone Marrow of Mice ........ William H. Knospe, Stephanie A. Gregory, Salah G. Husseini, Walter Fried, and Frank E. Trobaugh, Jr. 331

Bone Marrow Response to Erythropoietin in Polycythemia Vera and Chronic Granulocytic Leukemia .. Stanley Zucker, Diane M. Howe, and Lewis R. Weintraub 341

Studies on Red Cell Aplasia. III. Treatment With Horse Antihuman Thymocyte Gamma Globulin ............ Sanford B. Krantz 347

IgF Multiple Myeloma: A Report of the Third Case .... Ben C. Fishkin, Natalie Orloff, Louis E. Scaduto, David T. Borucki, and Hans L. Spiegelberg 361

Cell Migration Inhibition in Human Lymphomas Using Lymph Node and Cell Line Antigens .... Marta Braun, Luisa Sen, Alois E. Bachmann, and A. Pavlovsky 368

Possible Thrombosthenin Defect in Glanzmann's Thrombasthenia Francois Booyse, Donna Kisieleski, Ruth Seeler, and Max Rafelson, Jr. 377

Acceleration of Fibrin Polymerization by Calcium Ions Markley H. Boyer, John R. Shainoff, and Oscar D. Ratnoff 382

Effects of Exogenous Urea, Creatinine, and Guanidinosuccinic Acid on Human Platelet Aggregation In Vitro ............... James W. Davis, James R. McField, Phyllis E. Phillips, and Barbara A. Graham 388
Oxygen Affinity in Hemoglobin Köln Disease
Frank G. de Furia and Denis R. Miller 398


Hereditary Nonspherocytic Hemolysis With Erythrocyte Phosphofructokinase Deficiency ........Larry Waterbury and Eugene P. Frenkel 415

An Improved Radioisotope Dilution Assay for Serum Vitamin B12 Using Hemoglobin-coated Charcoal ...Yong K. Liu and Louis W. Sullivan 426

Editorial: Sickle Cell Disease .........................Helen M. Ranney 433

SPECIAL DEPARTMENTS

Abstracts .................................................. 440
News and Views ........................................... 450
Acknowledgment to Reviewers ....................... 451

No. 4 (April)

Surface Immunoglobulins of Circulating Lymphocytes in Mouse Plasmacytoma. I. Characteristics of Lymphocyte Surface Immunoglobulins Vincent Yakulis, Nirmala Bhoopalam, Sylvia Schade, and Paul Heller 453

Surface Immunoglobulins of Circulating Lymphocytes in Mouse Plasmacytoma. II. The Influence of Plasmacytoma RNA on Surface Immunoglobulins of Lymphocytes ..............Nirmala Bhoopalam, Vincent Yakulis, Nicolas Costea, and Paul Heller 465

Separation of Immunocompetent Cells From Human and Mouse Hemopoietic Cell Suspensions by Velocity Sedimentation D. Amato, D. H. Cowan, and E. A. McCulloch 472

Immunologic Studies of Antihemophilic Factor (AHF, Factor VIII). III. Comparative Binding Properties of Human and Rabbit Anti-AHF Leon W. Hoyer 481

"Impotent" Platelets in Albinos With Prolonged Bleeding Times Harold M. Maurer, James A. Wolff, Sue Buckingham, and Arthur R. Spielvogel 490

Platelet Function and Pyrophosphates in Osteogenesis Imperfecta William E. Hathaway, Clive C. Solomons, and John E. Ott 500

Dyskeratosis Congenita: Relationship to Fanconi's Anemia William Steier, G. Arthur Van Voolen, and Victor J. Selmanowitz 510
Experimentally Induced Alterations in the Affinity of Hemoglobin for Oxygen. I. In Vitro Restoration of Erythrocyte 2,3-Diphosphoglycerate and Its Relationship to Erythrocyte Purine Nucleoside Phosphorylase Activity in a Variety of Species .......Frank A. Oski, Harvey J. Sugerman, and Leonard D. Miller 522

Experimentally Induced Alterations in Affinity of Hemoglobin for Oxygen. II. In Vivo Effect of Inosine, Pyruvate, and Phosphate on Oxygen-Hemoglobin Affinity in Rhesus Monkey
Harvey J. Sugerman, Thomas W. Pollock, Ernest F. Rosato, Maria Delivoria-Papadopoulos, Leonard D. Miller, and Frank A. Oski 525

Hemoglobin Synthesis in Short-term Cultures of Human Fetal Hematopoietic Tissues ............................Ross S. Basch 530

Glucose-metabolizing Enzymes of the Mouse Erythrocyte: Activity Changes During Stress Erythropoiesis ..........John J. Hutton 542

Granulocyte Collection by Continuous-flow Filtration Leukopheresis

Porphyrin Synthesis by Cultured Lymphocytes .......Alan S. Josephson, Richard D. Levere, Ivan Lowenthal, Fred Swerdlow, and Mark Ginsberg 568

The Effect of L-Asparaginase on the Nucleic Acid Metabolism and Cell Cycle of Human Leukemia Cells .................E. Fred Saunders 575

SPECIAL DEPARTMENTS

Abstracts ......................................................... 581
News and Views .................................................. 591
Book Reviews ...................................................... 592
Books Received for Review ............................ 594

No. 5 (May)

Phytohemagglutinin-induced Lymphocyte Transformation: The Relationship to Prognosis of Hodgkin's Disease .......Michael P. Corder, Robert C. Young, Robert S. Brown, and Vincent T. DeVita 595

Endotoxin Stimulation in Patients With Lymphoma: Correlation With the Myelosuppressive Effects of Alkylating Agents
Ronald C. DeConti, Stephen R. Kaplan, and Paul Calabresi 602

Comparison of Chromatographic Patterns of Low Molecular Weight RNA From Burkitt Lymphoma, Infectious Mononucleosis, EB-Virus Transformed, and Normal Human Lymphoblasts
Seitoku Fujioka, Susan O'Hopp, Paul Berger, and Robert C. Gallo 611
DNA Synthesis in Chronic Myelogenous Leukemia Cells: Comparison of Results in Cells Containing Folate Binding Factor to Replicating Cells Without Binder ... Maria daCosta, Sheldon P. Rothenberg, and Barton Kamen 621

Ultrastructural Studies in Acute Promyelocytic Leukemia
Henry K. Tan, Bettye Wages, and Harvey R. Gralnick 628

Daunorubicin Metabolism in Acute Myelocytic Leukemia
David H. Huffman and Nicholas R. Bachur 637

Granulocyte Chemotaxis in the Chediak-Higashi Syndrome of Mink
Robert A. Clark, Harry R. Kimball, and George A. Padgett 644

Factor IX Deficiency and Bleeding in a Patient With Sheehan’s Syndrome
Clarence H. Brown, III, Larry K. Kools, Tah-Hsiung Hsu, and Jack Levin 650

Effect of Heinz Bodies on Red Cell Deformability .......... Alan Lubin and Jane F. Desforges 658

Studies on Human Erythrocyte Nucleotide Metabolism. I. Monisotopic Methodologies ....William N. Valentine and Klaus K. Kürschner 666

Studies on Human Erythrocyte Nucleotide Metabolism. II. Nonspherocytic Hemolytic Anemia, High Red Cell ATP, and Ribosephosphate Pyrophosphokinase (RPK, E.C. 2.7.6.1) Deficiency
William N. Valentine, Helen M. Anderson, Donald E. Paglia, Ernst R. Jaffe, Patricia N. Konrad, and Susan R. Harris 674

Detection of Glucose-Phosphate Isomerase Deficiency by a Screening Procedure ...................... Karl-Georg Blume and Ernest Beutler 685

Hemoglobins in Human Fetuses: Evidence for Adult Hemoglobin Production After the 11th Gestational Week
Haris A. Pataryas and George Stamatoyannopoulos 688

Studies of the Hemopoietic Microenvironment I. Changes in the Microvascular System and Stroma During Erythropoietic Regeneration and Suppression in the Spleens of CF1 Mice
Robert S. McCuskey, Howard A. Meineke, and Samuel F. Townsend 697

Abnormal Erythroid Maturation Following Acute Lead Toxicity in Mice
Bernard S. Morse, Gerald J. Germano, and Dennis G. Giuliani 713

Hypothesis: Refractory Anemias, Preleukemic Conditions, and Fetal Erythropoiesis ........... H. Rochant, B. Dreyfus, M. Bouguerra, and Hoi Tont-Hat 721

Editorial: Colony-stimulating Factor and Myelopoiesis
Frederick Stohlman, Jr., and Peter J. Quesenberry 727
No. 6 (June)

Nature of the Defect in Congenital Factor V Deficiency: Study in a Patient With an Acquired Circulating Anticoagulant
Joseph C. Fratantoni, Margaret Hilgartner, and Ralph L. Nachman 751

Fatalities During Remission of Childhood Leukemia
Joseph V. Simone, Elizabeth Holland, and Warren Johnson 759

Cellular Differentiation in a Murine Myelomonocytic Leukemia
M. J. Cline and D. Metcalf 771

Similarities of the Erythrocytes in Juvenile Chronic Myelogenous Leukemia to Fetal Erythrocytes
Helen S. Maurer, Loyda N. Vida, and George R. Honig 778

Bone Marrow and Peripheral Blood Globin Synthesis in an American Black Family With Beta Thalassemia
Shlomo Friedman, Frank A. Oski, and Elias Schwartz 785

Hemichromes in Single Inclusion Bodies in Red Cells of Beta Thalassemia
Eliezer A. Rachmilewitz and Bo Thorell 794

Intraerythrocytic Crystalloid Bodies in Cats
Norman H. Altman, Edward C. Melby, and Robert A. Squire 801

Migration of Cells From Shielded to Irradiated Marrow
Mary A. Maloney and Harvey M. Patt 804

Studies of the Hemopoietic Microenvironment. II. Effect of Erythropoietin on the Splenic Microvasculature of Polycythemic CF1 Mice
Robert S. McCuskey, Howard A. Meineke, and Stephen M. Kaplan 809

The Effect of Erythropoietin on Synchronized Rabbit Hemopoietic Tissue in Culture
G. Izak and A. Karsai 814

Hematopoiesis in the Embryonic Mouse Spleen: An Electron Microscopic Study
Meir Djaldetti, Hanna Bessler, and Richard A. Rifkind 826

Embryonic Origin of the Mouse Macrophage
M. J. Cline and M. A. S. Moore 842
Graft-vs.-Host Activity of Thymocytes: Relationship to the Role of Thymocytes in Hemopoiesis . . . Joan Wright Goodman, Kay T. Burch, and Nancy L. Basford 850

Lymphocytotoxins and Pernicious Anemia . . . . . . . . . . Leonard S. Goldberg, Jo Ellen Cunningham, and Paul I. Terasaki 862

Multiple Myeloma Incidence in Metropolitan Atlanta, Georgia: Racial and Seasonal Variations . . . . . . . . . . Peter McPhedran, Clark W. Heath, Jr., and Joan Garcia 866

Macroglobulinemia: An Analysis of Forty Patients
Malcolm R. MacKenzie and H. Hugh Fudenberg 874

Obituary: Jyoti Bhusan Chatterjea . . . . . . . . . . . . . . S. Swarup-Mitra and A. K. Basu 890

SPECIAL DEPARTMENTS
Abstracts .................................................. 892
Book Reviews .............................................. 902
Books Received for Review ............................. 904
Correspondence: AHF; Methemoglobinemia ............. 905
News and Views .......................................... 906