American Society of Hematology
Tenth Annual Meeting

LIST OF PAPERS TO BE READ

PLENARY SESSION
MONDAY, DECEMBER 4
9:00 a.m. to 12:30 p.m.


1. Erythrocytosis Associated with Abnormal Hemoglobin: Aspects of
Marrow Regulation. John W. Adamson (Introduced by Clement A.
Finch*), Division of Hematology, Department of Medicine, University
of Washington School of Medicine, Seattle, Washington.

2. In Vitro Study of Polycythemia Vera. Sanford B. Krantz,* Argonne
Cancer Research Hospital and Department of Medicine, University
of Chicago, Chicago, Illinois.

3. Chronic Granulomatous Disease in a Female—Evidence for an
Autosomal Recessive Form. Robert L. Baehner and David G. Nathan
(Introduced by Louis K. Diamond*), Children's Hospital Medical
Center, Boston, Massachusetts.

4. Hereditary Hemolytic Anemia Associated with Glucosephosphate
Isomerase (GPI) Deficiency—A New Enzyme Defect of Human
Erythrocytes. Majorie A. Baughan, William N. Valentine,* Donald
E. Paglia, Peter O. Ways, Ernest R. Simon,* Quin B. DeMarsh,* the
Department of Medicine, University of California School of Medicine,
Los Angeles, California; the Department of Medicine, University of
Washington School of Medicine, Seattle, Washington; and the Depart-
ment of Medicine, University of New Mexico School of Medicine,
Albuquerque, New Mexico.

5. Microangiopathic Hemolytic Anemia: Experimental Production of
the Syndrome in Vivo. M. L. Rubenburg, B. S. Bull, E. Regoezzi,
J. V. Dacie, and M. C. Brain (Introduced by S. L. Lee*), the Medical
Research Council Group for the Study of Hemolytic Mechanisms,
Department of Hematology, Royal Postgraduate Medical School,
London, and the Biophysics Division, National Institute for Medical
Research, Mill Hill, London.

6. Aplastic Anemia. Dependence of Function on Structure in the Bone
Marrow. W. H. Knospe,* J. Blom, and W. H. Crosby,* Presbyterian-

*Asterisk denotes member of the American Society of Hematology.
7. Inhibition of Leukemias in Man by L-Asparaginase. Herbert F. Oet- 
tjen, Lloyd J. Old, Edward A. Boyse, Harold A. Campbell, Frederick 
S. Philips, Bayard D. Clarkson, Lisa Tallal, Robert D. Leeper, Morton 
K. Schwartz, Jae Ho Kim (Introduced by Joseph H. Burchenal*), Sloan-
Kettering Institute of Cancer Research and Memorial Hospital for 
Cancer and Allied Diseases, New York.

8. Persistance of Synthesis of α Chains of Human Fetal Hemoglobin 
After Inhibition of Synthesis of γ Chains. George R. Honig (In-
troduced by Charles F. Abilgaard*), Department of Pediatrics, Uni-
versity of Illinois College of Medicine, Chicago, Illinois.

9. Phospholipid Metabolism in Rat Erythrocytes: Quantitative Studies 
of Lecithin Biosynthesis. Alvin R. Tarlov* and Eppe Mulder, Ar-
gonne Cancer Research Hospital and the Department of Medicine, 
University of Chicago, Chicago, Illinois.

10. The Biosynthesis of Fatty Acids in Human Leukocytes and Platelets. 
P. W. Majerus (Introduced by Carl. V. Moore*) Division of Hemato-
logy, Washington University School of Medicine, St. Louis, Missouri.

11. Suppression of the Primary Response to Foreign Red Blood Ceels: 
Comparison of Cortisol, Six-Mercaptopurine, and Antilympho-
cyte Serum. C. G. Craddock* and A. Wilkelstein, the Department 
of Medicine, University of California School of Medicine, Los Angeles, 
and Hematology Research Laboratory. Veterans Administration Cen-
ter, Los Angeles.

12. A High Potency Glycine-Precipitated Antihemophilic Factor Con-
centrate: Use in Hemophilia with Inhibitors. K. M. Brinkhous,* 
E. Shanbrom,* W. P. Webster, H. R. Roberts, L. Fekete and R. H. 
Wagner, Department of Pathology, University of North Carolina, 
Chapel Hill, North Carolina and Hyland Laboratories, Los Angeles, 
California.

13. A New Bleeding Syndrome with Defective Clot Retraction Due 
to Deficiency of a Plasma Protein. Thomas F. Newcomb,* Craig 
S. Kitchens, and Perry A. Berman, Department of Medicine, University 
of Florida College of Medicine, Gainsville.

PANEL DISCUSSION

10:30 a.m. to 12:30 p.m.

Problems Relating to Control of Polycythemia Vera

Louis R. Wasserman, Chairman

Introduction

Louis R. Wasserman, Mt. Sinai School of Medicine, New York. Problems 
Relating to Polycythemia Vera.
A. B. Gutman, Mt. Sinai School of Medicine, New York. URIC ACID METABOLISM IN MYELOPROLIFERATIVE DISEASES.

William H. Crosby, New England Medical Center, Boston. THE ROLE OF IRON IN THE CONTROL OF POLYCYTHEMIA VERA.

William Dameshek, Mt. Sinai School of Medicine, New York. THE CASE FOR PHLEBOTOMY.

Edwin E. Osgood, Medical School, University of Oregon, Portland. THE USE OF P32.

Harriet S. Gilbert, Mt. Sinai School of Medicine, New York and John Laszlo, Duke University School of Medicine, Durham, North Carolina. THE USE OF ALKYLATING AGENTS.

Discussion

BUSINESS MEETING
1:30 p.m. to 2:00 p.m.

SCIENTIFIC SESSION I
2:00 p.m. to 3:00 p.m.

14. COLLAGENOLYTIC ACTIVITY OF HUMAN LEUKOCYTES. Robert S. Brown, Gerald S. Lazarus, and Harold M. Fullmer (Introduced by Robert Gallo*), National Cancer Institute and National Institute of Dental Research, Bethesda, Maryland.

15. CHLORAMPHENICOL INHIBITION OF LEUKOCYTE OXIDASE. Sandra S. Kaplan, Pasquale E. Perillie,* and Stuart C. Finch,* Yale University School of Medicine, New Haven, Connecticut.

16. INHIBITION OF HUMAN LEUKOCYTE PYRIMIDINE DEOXYNUCLEOSIDE SYNTHESIS BY ALLOPURINOL, 6-MERCAPTOPURINE (6-MP), HYPOXANTHINE (Hx), AND URIC ACID. Robert C. Gallo,* Seymour Perry,* and T. R. Breitman, Medicine Branch and Laboratory of Physiology, National Cancer Institute, Bethesda, Maryland.

17. THERAPEUTIC IMPLICATIONS OF MURAMIDASE CHANGES IN ACUTE LEUKEMIA. Pasquale E. Perillie* and Stuart C. Finch,* Department of Medicine, Yale University School of Medicine, New Haven, Connecticut.

SYMPHOSIUM, LEUKOCYTE LYSOSOMES
3:00 p.m. to 5:00 p.m.

Elliott F. Osserman, Chairman

Zanvil A. Cohn, Rockefeller University, STRUCTURE AND FUNCTION OF LEUKOCYTE LYSOSOMES.

Gerald Weissman, New York University, STABILIZATION AND LABILIZATION OF LYSOSOMAL MEMBRANES.
Kenneth Mellmon, University of California, RELATIONSHIP BETWEEN LEUKOCYTE LYSOSOMAL ENZYMES AND KININ SYSTEMS.

Elliott F. Osserman, Columbia University, LYSOZYME AND THE MONOCYTIC DYSCRASIS.

Discussion

SCIENTIFIC SESSION II

2:00 p.m. to 5:00 p.m.

18. THE ORIGINAL HEMORRHAGIC FEVER. Lewis H. Dennis,* Boris E. Reisberg, Dan Crozier, and Marcel E. Conrad,* Walter Reed Army Institute of Research, Washington, D. C., and Fort Detrick, Maryland.

19. HAPTENE-DEPENDENT PLATELET ANTIBODIES IN THROMBOCYTOPENIA. E. Rachmilewitz, R. Ben Dawson, Jr., and B. Rachmilewitz (Introduced by W. H. Crosby*), Blood Research Laboratory, New England Medical Center Hospitals and Dept. of Medicine, Tufts University School of Medicine, Boston, Mass.

20. ISOZYMES OF GLYCOGEN PHOSPHORYLASE IN HUMAN PLATELETS AND LEUKOCYTES: RELATION TO MUSCLE PHOSPHORYLASE. A. A. Yunis,* and G. K. Arimura, Department of Medicine, University of Miami, Miami, Florida.

21. BIOCHEMICAL ENERGETICS OF PLATELET INTERACTION DURING SIMULATED THROMBUS INITIATION. S. Karpatkin* and R. Langer, Department of Medicine, New York University Medical School.

22. UTILIZATION OF PLATELETS IN RATS AND MAN. Richard H. Aster,* Thorndike Memorial Laboratory and Second and Fourth (Harvard) Medical Services, Boston City Hospital and the Dept. of Medicine, Harvard Medical School, Boston, Mass.

23. STUDIES OF PLATELET FUNCTION AND PROTEINS IN THREE PATIENTS WITH GLANZMANN'S THROMbasthenia. Harvey I. Weiss* and Shaul Kochwa, Department of Hematology, Mt. Sinai Hospital and School of Medicine, New York, N. Y.

24. A PREVIOUSLY UNRECOGNIZED PLASMA FACTOR REQUIRED FOR PLATELET FAzor-3 AVAILABILITY. J. R. Edson, W. Krivit,* and A. I. Bennett, Departments of Laboratory Medicine and Pediatrics, University of Minnesota, School of Medicine, Minneapolis, Minnesota.

25. ISOLATION AND CHARACTERIZATION OF CLOTTABLE LOW MOLECULAR WEIGHT HUMAN FIBRINOGEN PRODUCED BY LIMITED PLASMIN HYDROLYSIS; COMPARISON WITH NATURALLY OCCURRING HUMAN FIBRINOGENS. L. A. Sherman, Michael W. Mosesson, and Sol Sherry (Introduced by Manuel E. Kaplan*), Department of Internal Medicine, Washington University School of Medicine, St. Louis, Missouri.

26. A HEREDITARY DEFECT IN THE COAGULATION OF FIBRINOGEN BY THROMBIN: STUDIES IN A FAMILY WITH FIBRINOGEN CLEVELAND. W. B. Forman,
M. H. Boyer, and Oscar D. Ratnoff,* Western Reserve University, Department of Medicine, Cleveland, Ohio.

27. **Biochemical and Immunological Properties of an Acquired Inhibitor of Factor V.** D. I. Feinstein, S. I. Rapaport,* W. G. McGehee, and M. J. Patch, University of Southern California School of Medicine, Los Angeles, California.


**TUESDAY, DECEMBER 5**

**SCIENTIFIC SESSION III**

9:00 a.m. to 12:30 p.m.

30. **Regulation of Hemoglobin Synthesis in Normal Erythroid Cells.** Manfred Steiner and Mario Baldini,* Division of Hematologic Research, Pawtucket Memorial Hospital and Brown University, Providence, R. I.


32. **Differentiation of Erythroid Cells in Fetal Mice.** A. Fantoni, A. Chapelle, R. A. Rifkind,* and P. A. Marks,* Department of Medicine, Columbia University, College of Physicians and Surgeons, New York, N. Y.

33. **Improvement in Heme Synthesis Activity in Pyridoxine Responsive Anemia by Reduction in Iron Stores.** W. R. Vogler* and E. S. Mingioli, Emory University Clinic, Dept. of Internal Medicine, Atlanta, Georgia.

34. **Erythrocyte Acetylcholinesterase in PNH: A Difference Between the Complement-Sensitive and -Insensitive Populations.** T. R. Kunstling and Wendell F. Rosse (Introduced by Wayne Rundles*), Department of Medicine, Duke University Medical Center, Durham, North Carolina.

35. **In Vivo Peroxidation of Erythrocyte Lipid by Hyperoxia.** Robert Carolla, Charles E. Mengel,* and Rose Marie Husney, Ohio State University, Columbus, Ohio.

36. **Ultrastructure of Bone Marrow Histiocytes in Megaloblastic Anemia and the Anemia of Infections.** J. R. Goodman,* R. O. Waller-
stein,* and S. G. Hall, Veterans Administration Hospital, San Francisco, California.

37. Structural Characteristics of Erythrocyte Autoantibodies: Recent Studies and Implications. Richard F. Bakemeier* and John P. Leddy, Dept. of Medicine, University of Rochester School of Medicine and Dentistry, Rochester, New York.

38. Selective Hemolysis of Erythrocytes Following Alkylating Agents. William J. Harrington,* Reginald P. Pugh,* and Sharon P. Pochron, University of Miami School of Medicine, Miami, and Washington University School of Medicine, St. Louis, Missouri.

39. Rh Antigenicity: An Essential Component Soluble in Butanol. F. A. Green, (Introduced by Robin M. Bannerman*), VA Hospital and Department of Medicine, State University of New York, Buffalo, New York.

40. The Metabolism of the Third Component of Complement (C3) Globulin in Immuno-lytic Anemia. Lawrence D. Petz,* Diane J. Fink, Elizabeth A. Letsky, H. Hugh Fudenberg,* and Hans J. Müller-Eberhard, VA Hospital and University of California, San Francisco, and Scripps Clinic and Research Foundation, La Jolla, California.

41. Molecular Polymorphism of θM-Globulin: In Vitro and In Vivo Studies. Alan Soloman* and C. L. McLaughlin, University of Tennessee Memorial Research Center and Hospital, Knoxville, Tennessee.

42. Study of a Chemically Modified Bence Jones Cryoglobulin. Julius Kritzman* and Maurice Liss, New England Medical Center Hospitals, Boston, Mass.


**SCIENTIFIC SESSION IV**

9:00 a.m. to 10:15 a.m.


45. The Effects of Chemical Modifications on the Biological Activity of Human Transferrin. Stuart Kornfeld (Introduced by Elmer E. Brown*), Dept. of Medicine, Washington University Medical School, St. Louis, Missouri.


47. Ascorbic Acid Chelates in Iron Absorption: A Role for HCl and Bile. Marcel E. Conrad* and Stanley G. Schade, Department of
Hematology, Walter Reed Army Institute of Research, Washington, D. C.

48. **EFFECTS OF HEMODIALYSIS ON PLASMA LEVELS OF FOLIC ACID AND VITAMIN B₁₂.** V. M. Whitehead, C. H. Comty, G. A. Posen, M. Kaye. (Introduced by S. R. Townsend*), Divisions of Hematology and Nephrology, Department of Medicine, Montreal General Hospital, and McGill University Clinic, Montreal, Canada.

49. **MECHANISM OF SERUM LACTATE DEHYDROGENASE (SLDH) ELEVATION IN MEGALOBLASTIC ANEMIA.** I. Stein, S. Kochwa, R. Zalusky, B. Hoogstraten,* Mt. Sinai Hospital Services/City Hospital Center, Elmhurst, New York.

**SYMPOSIUM, VITAMIN B₁₂ METABOLISM AND B₁₂ COENZYMES**

10:30 a.m. to 12:30 p.m.

*Joseph R. Bertino, Chairman*

*Frank M. Huennekens,* Scripps Clinic and Research Institute, La Jolla, California. **CHEMISTRY AND BIOCHEMISTRY OF COENZYMES OF VITAMIN B₁₂.**

*H. Weisbach,* National Institutes of Health, Bethesda, Maryland. **VITAMIN B₁₂ IN METHIONINE BIOSYNTHESIS.**

*William S. Beek,* Harvard Medical School, Boston, Massachusetts. **VITAMIN B₁₂ IN DNA SYNTHESIS AND Methylmalonate Metabolism.**

**SCIENTIFIC SESSION V**

1:30 p.m. to 5:00 p.m.

50. **CHANGES IN PHYSICAL PROPERTIES OF STORED ERYTHROCYTES: RELATION TO IN VIVO SURVIVAL.** Anthony R. Haradin, Robert I. Weed,* and Claude F. Reed,* Departments of Medicine and of Radiation Biology and Biophysics, University of Rochester School of Medicine and Dentistry, Rochester, New York.

51. **THE EFFECT OF INORGANIC PHOSPHATE ON THE RED CELL HEXOKINASE REACTION.** Frank A. Oski* and Irwin A. Rose, Department of Biochemistry, Institute for Cancer Research and Department of Pediatrics, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.

52. **DEOXYRIBONUCLEOSIDE METABOLISM BY THE HUMAN ERYTHROCYTE.** Grant R. Bartlett,* Laboratory for Comparative Biochemistry, San Diego, California.

53. **AMINO SUGAR METABOLISM IN MATURING RED CELLS.** Rosalind Kornfeld (Introduced by Virginia Minnich), Division of Hematology, Washington University School of Medicine, St. Louis, Missouri.

54. **HEMOGLOBIN SINAI (σ₂₄β₂⁺): AN UNSTABLE HEMOGLOBIN CAUSING OCCULT HEMOLYSIS.** S. Charache* and A. M. Mondzac, Department of

56. **Hereditary Sideroblastic Anemia and G-6-PD Deficiency in a Negro Family.** Liborio Tranchida, Ananda S. Prasad,* Edward T. Konno, Lawrence Berman,* Samuel Albert, Charles F. Sing, and George J. Brewer,* Departments of Medicine and Pathology, Wayne State University, School of Medicine, Detroit, VA Hospital, Allen Park, Michigan, Detroit Institute for Cancer Research and Depts. of Human Genetics and Medicine (Simpson Memorial Institute) University of Michigan Medical School, Ann Arbor, Michigan.

57. **Homozygous Erythrocyte Glutathione-Peroxidase Deficiency.** T. F. Necheles,* Norman Maldonado, Antonio Barquet-Chediak and D. M. Allen,* Dept. of Pediatrics, New England Medical Center Hospital and the Dept. of Pediatrics, Tufts University School of Medicine, Boston, Mass. and the Dept. of Medicine, University of Puerto Rico, San Juan, Puerto Rico.


59. **Identification of an Isozyme of Erythrocyte Pyruvate Kinase (PK) Responsible for Hereditary Hemolytic Anemia.** Donald E. Paglia, William N. Valentine,* Marjorie A. Bauglian, Denis R. Miller, Claude F. Reed, and O. Ross McIntyre. Dept. of Medicine, UCLA School of Medicine, Los Angeles, Calif., the Depts. of Pediatrics and Medicine, Univ. of Rochester School of Medicine, Rochester, N. Y. and Dept. of Medicine, Dartmouth Medical School, Hanover, N. H.

60. **Degradation of Membrane Phospholipids and Thiols in the Pathogenesis of Peroxide Hemolysis.** Harry S. Jacob,* Samuel E. Lux IV, and Donald Howard, St. Elizabeth's Hospital, Tufts Medical School, Boston, Mass.

61. **Two Patterns of Lipid Loss in Spherocytosis and Hemolysis.** Richard A. Cooper and James H. Jandl,* Thorndike Memorial Laboratory and Second and Fourth (Harvard) Medical Services, Boston City Hospital and the Department of Medicine, Harvard Medical School, Boston, Mass.

63. Pyridoxine Deficiency and Reticulocyte Protein Synthesis. Fernando Padilla, Anthony Trakatellis, and Wallace N. Jensen,* Department of Medicine, Ohio State University College of Medicine, and the Department of Medicine and Biochemistry of the University of Pittsburgh, Columbus, Ohio and Pittsburgh, Pennsylvania.

SCIENTIFIC SESSION VI

1:30 p.m. to 5:00 p.m.

64. The Induction of Antibody Synthesis in Leukemic Lymphocytes by Immune Lymphocyte Extracts. Jerome I. Brody,* Department of Medicine, Graduate Hospital of the University of Pennsylvania and the University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.

65. Effect of Antigenic Stimulation on DNA Polymerase Activity of Rat Spleen. Gary A. Becker and Anthony V. Pisciotta,* Marquette University School of Medicine, Milwaukee County General Hospital, Milwaukee, Wisconsin.

66. In Vitro Interaction of Human Monocytes with IgG and Red Cells Sensitized with Different IgG Antibodies. H. Huber and H. H. Fudenberg,* Section of Hematology & Immunology, University of California, San Francisco Medical Center.

67. Role of Macrophages in the Immune Response of Lymphocytes to Antigen In Vitro. Evan M. Hersh and Jules E. Harris (Introduced by Emil J. Freireich*), M. D. Anderson Hospital and Tumor Institute, Texas Medical Center, Houston, Texas.

68. The Demonstration of a Delayed Proliferative Response in Phytohemagglutinin-Stimulated Lymphocytes from Patients with Lymphoproliferative Disorders. Arnold D. Rubin,* L. Ione Johnson, and William Dameshek,* Department of Hematology, Mount Sinai School of Medicine, New York, New York.

69. DNA:RNA Hybridization and Competition Studies of the Newly-Synthesized Radioactive Ribonucleic Acid (RNA) from Normal Small Lymphocytes (NL) and the Lymphocyte of Chronic Lymphocytic Leukemia (CLL). Paul E. Neiman and Patrick H. Henn (Introduced by Paul P. Carbone*), Medicine Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland.

70. Leukocyte Mobilization (LM) in Health and Acute Leukemia. Hansjoerg Senn and James F. Holland,* Roswell Park Memorial Institute, Buffalo, N. Y.

71. Bone Marrow Lymphocytosis. Roland T. Skeel, Edward S. Henderson* and John M. Bennett, National Cancer Institute and Clinical Pathology Dept., Clinical Center, Bethesda, Maryland.

72. Combination Chemotherapy for Acute Leukemia in Adults. Charles M. Huguley, Jr.,* for the Southeastern Cooperative Chemotherapy Study Group, Emory University, Atlanta, Georgia.
73. BCNU Therapy of Advanced Hodgkin’s Disease. Howard E. Lessner,* University of Miami, School of Medicine, Miami, Florida.

74. Daunomycin in the Treatment of Resistant Acute Lymphoblastic Leukemia. Barbara Jones,* Department of Pediatrics, West Virginia University School of Medicine, Morgantown, West Virginia.

75. Hemopoietic Precursor Cells of the Mouse Spleen Incapable of Self-Replication. M. Bennett and G. Cudkowicz,* Department of Experimental Biology, Roswell Park Memorial Institute, Buffalo, New York.

76. Studies in Granulocytopenic Subjects. Mortimer S. Greenberg,* Blossom Zanger, and Helena Wong. Medical Service, Lemuel Shattuck Hospital, and Department of Medicine, Tufts University School of Medicine, Boston, Massachusetts.

77. Leukocyte Dynamics in Acute Leukemia and in Blastic Crisis. Seymour Perry,* Herman Godwin, and Theodore Zimmerman, National Cancer Institute, Bethesda, Maryland.

TO BE READ BY TITLE ONLY

78. Regulation of Erythropoiesis in Man Following Androgens. R. Alexanian* and V. W. Cole, Department of Medicine, The University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, Texas.

79. Further Purification of Mouse Plasma Erythropoietin and the Effect of Its Presence on Plasma Esterase Isoenzymes. Robert C. Allen, Dorothy J. Moore, and James W. Fisher* (Sponsored by T. T. Odell, Jr.*), Department of Pharmacology, Medical Units, University of Tennessee, Memphis, Tennessee.


81. Studies of Folic Acid Activity in the Cerebrospinal Fluid (CSF) of Man. Jack B. Alperin*, Hematology Research Laboratory and Department of Internal Medicine, University of Texas Medical Branch, Galveston, Texas.

82. Changes in Fibrin Stabilizing Factor (FSF) Titers in Relationship to Bleeding Complications in Pregnancy and Neonatal Disease. Clara M. Ambrus,* Julian L. Ambrus,* Kenneth R. Niswander, and David H. Weintraub, Roswell Park Memorial Institute, the Children’s Hospital of Buffalo, and the State University of New York at Buffalo, Buffalo, N. Y.

83. Endocrine Factors in the Serum-Induced Thrombosis Phenomenon. J. L. Ambrus, C. M. Ambrus,* S. Amos, and K. Odake, Roswell Park Memorial Institute and the State University of New York at Buffalo, Buffalo, N. Y.

84. Diabetes Mellitus and Idiopathic Hemochromatosis. Stanley P. Bal-
cerzak, Daniel H. Mintz, and Maxwell P. Westerman,* Departments of Medicine, The Ohio State University, Columbus, Ohio, and University of Pittsburgh, Pittsburgh, Pennsylvania.

85. THE FREE a CHAINS in β THALASSEMIA. Arthur Bank,* Department of Medicine, Columbia University College of Physicians and Surgeons, New York.

86. IN Vivo HEMOLYSIS OF RAT "PNH" CELLS. Neil Baum, Charles E. Mengel,* and Stanley P. Balcerzak, The Ohio State University, Columbus, Ohio.


88. COMPUTERS IN HEMATOLOGIC DIAGNOSIS. C. R. Bishop and H. R. Warner (Introduced by M. M. Wintrobe*), Division of Hematology, University of Utah Medical Center, Salt Lake City, Utah.

89. HEREDITARY ELLIPTOCYTOSIS: SELECTED STUDIES IN GENETICS AND ANEMIA. Stuart R. Bless and Paul R. McCurdy,* District of Columbia General Hospital, Washington, D. C.

90. THE EFFECT OF CORTISOL ON THE PRELEUKEMIC PHASE OF RAUSCHER VIRUS (R.V.) INFECTION.* Isadore Brodsky,* S. Benham Kahn,* and Shirley D. Braverman, Department of Medicine, Hahnemann Medical College, Philadelphia, Pa.

91. NEONATAL LYMPHOCYTE REACTIVITY AS AN INDICATOR OF INTRAUTERINE BACTERIAL STIMULUS. Jerome I. Brody* and Frank A. Oski,* Department of Medicine, Graduate Hospital of the University of Pennsylvania, and Department of Pediatrics, Hospital of the University of Pennsylvania, and the University of Pennsylvania School of Medicine, Philadelphia, Pa.


93. ACTIVITY OF L-ASPARAGINASE AGAINST INTRACEREBRALLY INOCULATED MOUSE LEUKEMIA. Joseph H. Burchenal* and Malin R. Dollinger, Sloan-Kettering Institute for Cancer Research and Memorial Hospital for Cancer and Allied Diseases, New York, N. Y.

95. **Red Cell Aldolase Deficiency in Hereditary Spherocytosis.** R. G. Chapman and L. L. McDonald (Introduced by Matthew Block*), Department of Medicine, School of Medicine, University of Colorado, Denver, Colorado.

96. **Neutrophil Releasing Activity in the Plasma of Normal Human Subjects Injected with Endotoxin.** P. A. Chervenick, D. R. Boggs,* and J. C. Marsh, Departments of Medicine of the University of Utah College of Medicine, Rutgers Medical School and Yale University School of Medicine.

97. **The Effect of Composition of the Medium Upon the Retention of Enzyme Activity by Human Erythrocyte Ghosts.** H. B. Collier* and G. Duchon, Departments of Pathology and Bio-Chemistry, University of Alberta, Edmonton, Canada.

98. **Variables Affecting Removal of Transferrin-Bound Fe by Desferrioxamine.** M. W. Conovitz, D. Prager,* and A. Sawitsky, Division of Hematology, Department of Laboratories, The Long Island Jewish Hospital, New Hyde Park, N. Y.

99. **Studies on Proliferation and Migration of Thymic Cells.** E. P. Cronkite,* A. D. Chanana, D. Joel, K. Rai, and L. M. Schiffer, Medical Department, Brookhaven National Laboratory, Upton, L. I., N. Y.

100. **Localization of Erythrocyte Antigenic Sites Associated with Autoimmune and Drug Induced Hemolytic Anemias Using Ferritin Labelled Antibody.** W. C. Davis, S. D. Douglas, L. D. Petz,* and H. H. Fudenberg,* Section of Hematology & Immunology, University of California San Francisco Medical Center, San Francisco, California.

101. **Asparagine Metabolism in Normal and Leukemic Leukocytes.** Nikolay Dimitrov and Isadore Brodsky,* Section of Hematology, Hahnemann Medical College, Philadelphia General Hospital, Philadelphia, Pennsylvania.

102. **Clotting Activity in the Isolated Perfused Spleen.** W. J. Dodds (Introduced by Kent D. Miller*), Division of Laboratories and Research, New York State Department of Health and Department of Pathology, Albany Medical College, Albany, New York.

103. **Fatty Acid Oxidation by Human Platelets and its Stimulation by Thrombin.** R. Donabedian and Y. Nemerson,* Yale University School of Medicine, New Haven, Connecticut.

104. **Graft vs. Host Reaction Associated with Wiskott-Aldrich Syndrome—an Immuno-Electronmicroscopic Study.** S. D. Douglas, W. C. Davis, G. N. Vyas, J. Miller, and H. H. Fudenberg,* Section of Hematology and Immunology, University of California San Francisco Medical Center, San Francisco, California.

105. **Studies on Hormonal Influence on Biosynthesis of Fatty Acids by Human Blood Cells. II. Alteration in the Pattern of Human Hemocytic Production of Lipids Induced by an Oral Contraceptive (Enovid§).** Gregory S. Duboff, Kosi Awa‡, and Allen R. Hennes (In-
TENTH ANNUAL MEETING

106. A Unified Method for Regional Anticoagulation of Blood. N. D. Durie, R. R. Hansebout, E. W. Peterson, and T. R. Ringer, Department of Medicine, Ottawa Civic Hospital, Ottawa, Canada.

107. Platelet Economics in Children with Thrombocytopenia. Inta J. Ertel and William A. Newton, Jr.,* The Children’s Hospital, Ohio State University, Columbus, Ohio.

108. Platelet Size and Function in Heritable Disorders of Connective Tissue. J. Worth Estes,* MRC Clinical Genetics Research Unit, Hospital for Sick Children, Great Ormond Street, London, England, and the University Hospital, Boston, Massachusetts.


111. The Effect of Tissue Destruction on the Autoimmune Response in NZB Mice. H. D. Flad, J. H. L. Playfair, A. Ghaffar, and P. A. Miescher,* Department of Medicine, New York University Medical Center, New York, N. Y.

112. Hemopoietic Precursor Cells Growing In Vitro and In Vivo Are Distinguishable. Roger S. Foster, Jr., Michael Bennett, Gustavo Cudkowicz,* and Donald Metcalf, Roswell Park Memorial Institute, Buffalo, New York.


114. An Enzyme Deficiency (Pyrimidine Deoxyribosyltransferase) in Leukocytes from Patients with Chronic Myelogenous Leukemia (CML) in Remission. Robert C. Gallo,* Carla Davis, Seymour Perry,* National Cancer Institute, Bethesda, Maryland.


118. Lipid Composition of the Lymphocyte in Chronic Lymphocytic Leukemia. F. Goswitz, and F. Snyder (Introduced by Kong-oo Goh*), Oak Ridge Associated Universities, Oak Ridge, Tennessee.

119. Nuclear Fragmentation in Mature Polymorphonuclear Leukocytes: A Hitherto Undescribed Anomaly. Susan S. Gustke, Gary A. Becker, John C. Garancis, and Anthony V. Pisciotta,* Marquette University School of Medicine, Milwaukee County General Hospital, Milwaukee, Wisconsin.


121. Studies on Purified Erythrocyte 2,3-Diphosphoglyceric Acid Phosphatase. Donald R. Harkness and William A. Thompson (Introduced by Adel A. Yunis*), Department of Medicine, University of Miami, Miami, Florida.

122. Effect of Cytosine Arabinoside on the Immune Response of Mice to Sheep Red Blood Cells. Jules E. Harris and Evan M. Hersh, University of Texas, M. D. Anderson Hospital and Tumor Institute, Houston, Texas.

123. A Clinical Morphologic Study of the Natural History of Multiple Myeloma. Donald M. Hayes,* Charles L. Spurr,* George H. West, and Robert W. Prichard, Departments of Medicine and Pathology, Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, North Carolina.

124. New Concepts of the Progressive Antithrombin Mechanism. Henry H. Henstell* and Miriam Kligerman, Cedars-Sinai Medical Center, Los Angeles, California.

125. Clinical Studies of Ten Patients with Leukemia and Lymphosarcoma Treated with L-Asparaginase. Joseph M. Hill,* Joseph Roberts,* Ellen Loeb,* Amanullah Khan, and Ayten M. MacLellan, Wadley Institutes of Molecular Medicine, Dallas, Texas.

126. Maintenance of Erythrocytes at 37°C. Roland G. Hiss, George J. Brewer,* and Peter W. Dieleman, Simpson Memorial Institute and Department of Human Genetics, University of Michigan Medical Center, Ann Arbor, Michigan.

127. Chronic Lymphocytic Leukemia—Does It Predispose to Other Neoplasms? George A. Hyman,* Columbia University College of Physicians and Surgeons, New York, N. Y.

128. Effect of Growth Hormone, Testosterone, and Pitressin on Erythropoiesis and Erythropoetin of Pituitary-Deficient Patients. J. H. Jepson and E. McGarry (Introduced by Louis Lowenstein*), Department of Medicine, Royal Victoria Hospital, and McGill University Clinic, Montreal, Quebec, Canada.

129. Hematological and Biochemical Effects of an Antifolate in Man.
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S. B. Kahn* and S. A. Fein, Hahnemann Medical College and Hospital, Philadelphia, Pennsylvania.

130. THE MECHANISM BY WHICH PLETHORA SUPPRESSES ERYTHROPOIESIS. *Thomas M. Kilbridge, Walter Fried,* and Paul Heller,* Veterans Administration West Side Hospital and Department of Medicine, University of Illinois College of Medicine, Chicago, Illinois.

131. MALABSORPTION OF IRON IN IRON DEFICIENCY. A STUDY IN CHILDREN AND GROWING DOGS. Carlien Kimber and Lewis R. Weintraub,* Blood Research Laboratory, New England Medical Center Hospitals, and Department of Medicine, Tufts University School of Medicine, Boston, Massachusetts.

132. A MODEL TO STUDY CHLORAMPHENICOL MARROW DEPRESSION. *Donald R. Korst,* Nastrollah T. Shahidi, Lyle D. Miller, and Carl Olson (Technical Assistance Janet Quirk), Departments of Medicine, Pediatrics and Veterinary Science, University of Wisconsin, Madison, Wisconsin.

133. CULTURED CELL LINES IN STUDIES OF BLOOD GROUP GENETICS. William J. Kuhns,* Yvonne Faur, and S. Branson, Department of Pathology, New York University School of Medicine, New York, N. Y.

134. VITAMIN B\textsubscript{12} TRANSPORT IN FETAL PLASMA. Antti Kumento, Charles A. Hall,* Alexander E. Finkler, Mary Rappazzo, and A. Leonard Luby,* Radioisotope-Hematology Research Laboratory, V. A. Hospital, Albany, N. Y.

135. USE OF HEPARIN AND UROKINASE IN THE TREATMENT OF ACUTE THROMBOTIC THROMBOCYTOPENIC PURPURA. Han C. Kwaan,* Hunter O. Cutting, Robert M. Stanzler, and Elizabeth V. Potter, Department of Medicine, Northwestern University Medical School at the Veterans Administration Research Hospital and Cook County Hospital, Chicago, Illinois.

136. MEMBRANE CHANGES IN NORMAL ERYTHROCYTES AND ERYTHROCYTES IN HEMOLYTIC STATES. G. R. Langley and F. M. Smith (Introduced by H. C. Read*), Department of Medicine, Dalhousie University, and the Victoria General Hospital, Halifax, Canada.

137. COMBINATION CHEMOTHERAPY OF LYMPHOMA. Raymond E. Lenhard, Barth Hoogstraten,* and Albert H. Owens, Jr., Acute Leukemia Cooperative Group B and Eastern Cooperative Oncology Group, Johns Hopkins Hospital, Baltimore, Maryland.

138. A SENSITIVE IN VITRO SYSTEM TO DETECT ENDOTOXIN. Jack Levin* and Frederik B. Bang, Marine Biological Laboratory, Woods Hole, Massachusetts, Department of Medicine, School of Medicine, and Department of Pathobiology, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Maryland.

139. IRON METABOLISM IN CHRONIC LIVER DISEASE. Dorothy C. H. Ley* and Jean Hogarth, Department of Medicine, Toronto Western Hospital, and University of Toronto Faculty of Medicine, Toronto, Canada.

140. THE RELATIONSHIP OF MEMBRANE CHARACTERISTICS TO LEUKOCYTE MATURITY: IMMATURITY OF THE "MATURE" LYMPHOCYTE. Marshall A.
141. **Depressed Utilization of Both Erythrocyte and Inorganic Iron Produced by Sterile Inflammation.** H. Lopas and S. F. Rabiner,* Michael Reese Hospital and Medical Center, Medical Research Institute, Chicago, Illinois.

142. **Loss of Activity of Milligram Quantities of Erythropoietin on Membrane Filters.** Peter H. Lowy, Geoffrey Keightley,* and Charity Waymouth, California Institute of Technology, Pasadena, California, and The Jackson Laboratory, Bar Harbor, Maine.


144. **The Effect of Riboflavin on Acute Bone Marrow Toxicity Due to Chloramphenicol.** Paul R. McCurdy,* District of Columbia General Hospital, Washington, D.C.

145. **Factors Influencing the Normal Lymphocyte Response to PHA.** O. Ross McIntyre, Department of Medicine, Dartmouth Medical School, Hanover, New Hampshire.

146. **Counter-Current Distribution of Normal Human Peripheral Blood Leukocytes.** A. A. MacKinney,* Hematology Division, Veterans Administration Hospital, Madison, Wisconsin.

147. **Anti Antibody Activity in a Waldenstrom's Macroglobulin.** M. R. MacKenzie, N. L. Warner, and H. H. Fudenberg,* Section of Hematology and Immunology, University of California San Francisco Medical Center.

148. **Red Cell Stickiness.** R. L. MacMillan* and C. R. Cowan, Blood and Vascular Unit, Department of Medicine, University of Toronto, Toronto, Ontario, Canada.

149. **Chromosomal Changes in Fortner's Plasmacytoma No. 1 in the Golden Hamster.** Sergio A. Mancinelli, William J. Hammack,* Sara C. Finley, and Wayne H. Finley, Division of Hematology, VA Hospital, University of Alabama Medical Center, Birmingham, Alabama.

150. **Cellular Proliferation and Response to Chemotherapy in Childhood Acute Leukemia.** Alice Maniatis, Thomas F. Necheles,* and Donald M. Allen,* Blood Research Laboratories, New England Medical Center Hospitals and the Departments of Medicine and Pediatrics, Tufts University School of Medicine, Boston, Massachusetts.

151. **Cyclic Leucocytosis in Chronic Granulocytic Leukemia.** A. A. Morley, A. G. Baikie, and D. A. G. Galton (Introduced by Frederick Stohlman, Jr.*), The University of Melbourne, Melbourne, Australia, and The Royal Postgraduate Medical School, London, England.

152. **Hemoglobin SC Disease During Pregnancy.** John R. Murphy,* Department of Medicine, Western Reserve University, Cleveland, Ohio.

154. Proliferative Activity in Acute Leukemia of Childhood. M. E. Nesbit, Jr.,* and W. Krivit,* Department of Pediatrics, University of Minnesota School of Medicine, Minneapolis, Minnesota.

155. Hereditary Predisposition to Leukemia. Audrey Hart Nora, James J. Nora, and Donald J. Fernbach,* Department of Pediatrics, Baylor University College of Medicine, Houston, Texas.

156. Generation Cycle of Rat Megakaryocytes. T. T. Odell, Jr.,* C. W. Jackson, and R. S. Reiter, Biology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.


158. The Role of the Thymus in the Differentiation of Precursors of Antigen-Sensitive Cells. David Osoba,* Department of Medicine, University of Toronto, Princess Margaret Hospital, Toronto, Ontario, Canada.

159. The Ag-Ab Complex Nature of a Cryoglobulin. F. Paraskevas (Introduced by Paul Green*), Department of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada.

160. Coagulation and Fibrinolytic Abnormalities in Experimental Liver Homotransplantation. Liberto Pechet* and Carl G. Groth, Departments of Pathology, Medicine and Surgery, University of Colorado Medical Center and Denver Veterans Administration Hospital, Denver, Colorado.


162. The Mechanism of Glucose-6-Phosphate Dehydrogenase Deficiency Types Gd* and GdMediterranea. S. Piomelli,* L. M. Corash, D. D. Davenport, J. Miraglia, and E. L. Amorosi, New York University School of Medicine, New York, N. Y.


164. Neoplasia of the Reticuloendothelium and Autoimmune Hemolytic Anemia: Etiologic Concepts. Bernard Pirofsky,* Division of Immunology, Allergy, and Infectious Disease, University of Oregon Medical School, Portland, Oregon.

165. Ovalocytosis Associated with Malignant Thymoma. Richard F.
Platzer,* Department of Medicine, Clifton Springs Hospital and Clinic, Clifton Springs, New York, and Department of Medicine, University of Rochester, School of Medicine and Dentistry, Rochester, N. Y.

166. LEUKEMIC FORM OF IMMUNOCYTIC DYSCRASIA. W. Pruzanski, M. E. Platts, and M. A. Ogryzlo, Immunoprotein Laboratory, University of Toronto Rheumatic Disease Unit, and Department of Pathology, Wellesley Hospital, Toronto, Canada.

167. METABOLISM OF NORMAL LYMPHOCYTES AND GRANULOCYTES AND LEUKEMIC LYMPHOCYTES DURING INITIAL HOURS OF CELL CULTURE. Yale Rabinowitz,* Inge Schimo, and Betty A. Wilhite, Research Service, Veterans Administration Hospital, Hines, Illinois, and the Department of Medicine, Loyola University Stritch School of Medicine, Hines, Illinois.

168. REDUCTION OF OXIDIZED GLUTATHIONE (GSSG) AND THE STABILITY OF THE GLUTOSE-6-PHOSPHATE DEHYDROGENASE (G-6-PD) OF HUMAN ERYTHROCYTES. Egmond E. Rieber, Neckama S. Kosower,* and Ernst R. Jaffe,* Department of Medicine, Albert Einstein College of Medicine—Bronx Municipal Hospital Center, New York, N. Y.

169. THE BONE MARROW RETICULOCYTE COUNT IN HEMATOLOGICAL DISORDERS. Perry G. Rigby,* Peyton T. Pratt,* Lawrence Zacharia, and Eugene E. Baillie, Eppley Institute and Department of Internal Medicine, University of Nebraska College of Medicine, Omaha, Nebraska.

170. ECONOMY OF ATP IN HUMAN PLATELETS. Robert Rock and Yale Nemerson,* Yale University School of Medicine, New Haven, Connecticut.

171. EARLY EFFECTS OF HYPOXIA ON ERYTHROID CELLS IN RABBITS. B. L. Roh, L. Moller, and J. W. Fisher* (Introduced by L. W. Diggs*), Department of Pharmacology, University of Tennessee Medical Units, Memphis, Tennessee.

172. THE IDENTIFICATION, EXTRACTION, AND PROPERTIES OF A MACROMOLECULAR FACTOR IN ILEAL MUCOSA WHICH BINDS INTRINSIC FACTOR. S. P. Rothenberg,* Blood Research Laboratory, Department of Medicine, New York Medical College, New York, N. Y.

173. LEUKEMIC RETICULO-ENDOTHELIOSIS—RETICULOSIS OR LYMPHOPROLIFERATIVE DISORDER? Arnold D. Rubin,* Steven D. Douglas, Philip R. Clade, Peter F. Hoffman, and Lawrence N. Chessin, Department of Hematology, Mount Sinai School of Medicine, New York, N. Y., and Department of Medicine, University of California, San Francisco, California, and the NIAID, NIH, Bethesda, Maryland.

174. THE EFFECT OF ACUTE ALCOHOL INGESTION ON RED CELL BURR FORMATION IN SICKLE CELL TRAIT PATIENTS. Shirley Rubler, Renee Fleischer, and Eleanor Roth (Introduced by Leo M. Meyer*), Departments of Medicine and Hematology, Long Island Jewish Hospital, Queens Hospital Center Affiliation, Jamaica, N. Y.

175. ANTI-HEPARIN ACTIVITY OF GRANULOCYTE LYSOSOMAL CATIONIC PROTEINS. H. I. Saba, H. R. Roberts, and J. C. Herion,* Departments of Medicine and Pathology, University of North Carolina School of Medicine, Chapel Hill, N. C.
176. **Quantitative Defects in Lymphocyte Metabolism in Malignant Dysproteinemias.** S. E. Salmon, R. M. Kamin, and H. H. Fudenberg,* Section of Hematology and Immunology, University of California San Francisco Medical Center, San Francisco, California.

177. **Hemoglobin F and A2 Values in Relation to Age of Patients With Sickle Cell Anemia, Sickle Cell Hemoglobin C Disease and Sickle Cell Thalassemia.** Rose G. Schneider, Satoshi Ueda, Mary Ellen Haggard,* and Jack B. Alperin,* Department of Pediatrics, University of Texas Medical Branch, Galveston, Texas.

178. **Clinical Significance of an In Vitro Test for Sensitivity of Leukemic Lymphocytes to Mechlorethamine HCl (HN2).** Robert Schrek, Veterans Administration Hospital, Hines, Illinois.

179. **A Difference in Erythropoietin Production Between Anemic and Hypoxic Mice.** Richard Shadduck, Donald Howard, and Frederick Stohlman, Jr.,* St. Elizabeth's Hospital, Tufts Medical School, Boston, Massachusetts.

180. **Inhibition of Fibrin Stabilizing Factor (Factor XIII) Activation by Heparin, Polybrene and Protamine.** J. N. Shanberge,* N. Tagawa, and M. R. de la Fuente, Departments of Pathology, Evanston Hospital, Evanston, and Northwestern University School of Medicine, Chicago, Illinois.

181. **Pneumococcal “Hemolysin”.** Clare N. Shumway,* Department of Pediatrics, Medical College of Virginia, Richmond, Virginia.

182. **Tocopherol Transport in Erythrocytes.** Robert Silber,* Ruth Winter, and Herbert J. Kayden, Department of Medicine, New York University School of Medicine, New York, N. Y.


184. **Efflux of Oxidized Glutathione from Normal and Glucose-6-Phosphate Dehydrogenase Deficient Erythrocytes.** S. K. Srivastava and Ernest Beutler,* Division of Medicine, City of Hope Medical Center, Duarte, California.

185. **Lactate Dehydrogenases in Megaloblastic Anemia.** William H. Starkweather and Herbert H. Spencer, U. S. Veterans Administration Hospital and Department of Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan.

186. **Host Responses to Erythropoietin and to a Virus Which Induces Polycythemia.** R. A. Stecces, E. A. Mirand,* and R. D. Lange,* Roswell Park Memorial Institute, New York State Department of Health, Buffalo, New York, and University of Tennessee Memorial Research Center, Knoxville, Tennessee.

187. **Inhibition of Fava Bean Hemagglutination by Native Ox Bile.** Elkin Sucescu and Abraham M. Frumin,* Departments of Laboratories and Research, Albert Einstein Medical Center, Southern Division, Philadelphia, Pennsylvania.

188. **Immunoassay for A2 Hemoglobin.** Leif G. Suhrland and Steven A.
189. THE EFFECT OF BILIRUBIN ON PLATELET FUNCTION. Udom Sueansri, W. H. Cheung, and A. Sawitsky,* Division of Hematology, Department of Laboratories, The Long Island Jewish Hospital, New Hyde Park, New York.


191. HISTOCHEMICAL STUDY OF RETICULO-ENDOTHELIAL SYSTEM OF HUMAN MARROW—ITS POSSIBLE TRANSPORT ROLE. S. Trubowitz* and B. Masek, VA Hospital, East Orange, New Jersey, and New Jersey College of Medicine.

192. DISSOCIATION BETWEEN STEM CELL AND ERYTHROID RESPONSE TO HYPOXIA. W. S. Tyler, B. Kubanek, L. Ferrari, D. Howard, and F. Stohlman, Jr.*, St. Elizabeth's Hospital, Tufts Medical School, Boston, Massachusetts.

193. REGULATORY MECHANISMS CONTROLLING THE INTESTINAL ABSORPTION OF IRON AND COBALT. Leslie S. Valberg (Introduced by Peter R. Galbraith*), Division of Gastroenterology and Special Investigation Unit, Kingston General Hospital, and Department of Medicine, Queen's University, Kingston, Ontario, Canada.

194. SITE OF ACTION OF A CIRCULATING ANTICOAGULANT. Robert L. Wall,* Anwarul Haq, and Delma Moore, Department of Medicine, Ohio State University, College of Medicine, Columbus, Ohio.

195. ABSORPTION OF HEMOGLOBIN IRON: THE ROLE OF A SUBSTANCE IN THE INTESTINAL MUCOSA THAT RELEASES IRON FROMHEME. Lewis R. Weintraub,* Morton B. Weinstein, Hans-Jurg Juser, and Sheila Rafal, Blood Research Laboratory, New England Medical Center Hospitals, and Department of Medicine, Tufts University School of Medicine, Boston, Massachusetts.

196. EFFECTS OF COLCHICINE AND VINCA ALKALOIDS ON PLATELET STRUCTURE AND FUNCTION. James G. White,* Department of Pediatrics, University of Minnesota School of Medicine, Minneapolis, Minnesota.

197. PREVENTION OF ROD FORMATION IN SICKLE CELLS BY CHILLING, COLCHICINE AND VINCA ALKALOIDS. James G. White,* Department of Pediatrics, University of Minnesota School of Medicine, Minneapolis, Minnesota.

198. A NEW AUTOMATIC DEVICE FOR THE OBJECTIVE MEASUREMENT AND RECORDING OF FIBRINOlySIS. H. Wilkens and N. Back,* Department of Biochemical Pharmacology, School of Pharmacy, State University of New York at Buffalo, New York.

199. THE DEVELOPMENT OF DICLONAL GAMMOPATHY FOLLOWING SUPPRESSIVE
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Therapy in a Case of Malignant Reticulosis. Henry E. Wilson* and Gerald M. Penn, Ohio State University, Columbus, Ohio.

200. Responses of Rheumatoid Hemopathies to Pharmacologic Testosterone Therapy. Bruce M. Wimer,* Hematology Section, Lovelace Clinic, Albuquerque, New Mexico.

201. Effect of Insulin on Vitamin B₁₂ Uptake by the Rat Liver. Konstanty Wisniewski and George B. Jerzy Glass,* Flower and Fifth Avenue Hospital, New York, N. Y.

202. The ^{57}Co Vitamin B₁₂ Plasma Level Absorption Test: A Study of the Role of the Flushing Dose. H. J. Woodliff and B. K. Armstrong, Department of Haematology, Royal Perth Hospital, Western Australia.


204. Accumulation of Non-proliferating Lymphocytes in Chronic Lymphocytic Leukemia: Leukokinetics Studies. Theodore S. Zimmerman, Herman A. Godwin, and Seymour Perry,* Medicine Branch, National Cancer Institute, National Institute of Health, Bethesda, Maryland.

205. The Evaluation of Remission and Relapse in Patients with Acute Leukemia Utilizing the In Vitro Uptake of Tritiated Thymidine by Peripheral Blood Leukocytes. Theodore S. Zimmerman, Herman A. Godwin, Marvin Zelen, and Seymour Perry* (with technical assistance of Barbara C. Nagel), Medicine Branch and Biometry Branch, National Cancer Institute, National Institutes of Health, Bethesda Maryland.