
This book is the second in a series of medical books based on the premise that the clinical sciences form a discipline firmly based on the fundamental sciences. This premise was applied to a symposium held in Liége, Belgium in 1970 to gather together biologists, medical doctors, and statisticians for the expressed purpose of applying mathematical methods to the analysis of platelet kinetics. This book contains the material presented at that symposium. It is divided into six parts, and the stated purpose is most directly served in part I, analysis of platelet radioactivity curves using direct platelet labels, and, to a lesser extent, part III, use of iron kinetics for measurement of total megakaryocyte mass by the isotope dilution method. Part I makes up a third of the book and contains many pages of mathematical formulae. An interpretive review of this section would have been valuable to the nonmathematician.

Part II deals with analysis of platelet radioactivity curves using megakaryocyte labels, and bioassays for thrombopoietin are discussed in this section. New data in this section, presented by Penington, indicate substantial variability in the demonstration of thrombopoietin in plasma of human beings with different types of diseases complicated by thrombocytopenia. However, Penington reported that megakaryocytic DNA was increased in polycythemia vera and decreased in chronic granulocytic leukemia, as might have been suggested from earlier reports of abnormalities in megakaryocyte size in these diseases. This section shows how some of the basic observations made in experimental animals are now leading to an understanding of human disease.

Most of the papers in this book are summaries of more comprehensive published observations by a number of authorities. Divergent findings and conclusions are presented, and the editors and authors have effectively presented some of the controversies and paraphrased the discussions. Much of Harker's work on quantification of megakaryocytopoiesis is summarized by him in several sections of this book. In an editorial comment, Dr. Paulus notes that, "some of the bases of this work, however, deserve discussion," and this seems appropriate in view of information in accompanying papers on ploidy, iron kinetics, etc. Throughout the clinical section, brief summaries, without experimental data, are included in an apparent effort to provide a complete bibliography.

This book brings together much of what
is known about megakaryocytopoiesis and platelet turnover. Published works have been summarized and some new data presented. The book should be of interest to investigators or teachers of platelet kinetics and to those interested in hematopoiesis in general. Investigators may find that the descriptions of methods, part VI of the book, will save them some time in the library.—Shirley Ebbe, M.D.


J. B. Watson has been quoted as declaring that hemoglobin is not the center of the universe. Considering the number of investigators who devote their efforts to studying this protein, one might guess that a good proportion of the scientific community disagrees with Dr. Watson. In any event, in this age of Einsteinian space, the center depends upon the point of view. Thus, although some of the topics in Hemoglobin Synthesis have recently been reviewed elsewhere, interest in hemoglobin is great enough and progress in the area swift enough to merit additional coverage now.

This book is a new volume in the Series Haematologica. It contains seven short reviews of recent advances made in the understanding of several aspects of hemoglobin biosynthesis. The articles are concise and well written by recognized authorities. In general the reviews are not exhaustive, are noncontroversial, and describe work done by the authors themselves. Rifkind, Terada, and Marks discuss the ontogeny of hemoglobin synthesis in the mouse. Williamson and Morrison, and Lingrel and his associates, describe their experiments on the isolation of the messenger RNA for globin. Wilson presents the experiments that he and Dintzis performed to show that the polypeptide chains of globin, like the proteins of Escherichia coli, are initially synthesized with a methionine residue at the amino terminal position which is subsequently removed. Winterhalter and Glatthaar speculate on the possible role of some minor hemoglobin fractions and partially heme-depleted species as intermediates in hemoglobin synthesis. The problem of hemoglobin synthesis in thalassemia (Bank and Marks) and the hemoglobinopathies (White) is covered in two papers.

Considering the speed of accumulation of new knowledge in some of these areas, the reviews are reasonably up to date. References run to the end of 1971.

While primarily suitable for those working in or already familiar with the area of hemoglobin synthesis, thalassemia, and the hemoglobinopathies, this volume does provide a readable though technical résumé of the present knowledge of hemoglobin synthesis for other interested hematologists.

—Ronald F. Rieder, M.D.

RED CROSS SYMPOSIUM

The Fifth Annual Red Cross Scientific Symposium of the American National Red Cross on The Human Red Cell in Vitro will be held on May 7–8, 1973 in Washington, D.C. Attendance is by invitation only. For further information, contact the American National Red Cross, Blood Research Laboratory, 9312 Old Georgetown Road, Bethesda, Md. 20014.

INTERNATIONAL SOCIETY
OF HEMATOLOGY

The Second Meeting of the European and African Division of International Society of International Society of Hematology will take place in Prague, Czechoslovakia, August 27–29, 1973. Program: Etiology, pathogenesis, and treatment of leukemia; Hemocoagulation and fibrinolysis; Immunology of leukocytes and transplantation problems; surface structures of lymphoid cells and their function. A symposium on human red cells blood group, on the occasion of the 100th anniversary of Dr. Jansky, will be held during the Congress. For information apply at the Czechoslovak Medical Society J. E. Purkyne, Sokolská 31, Praha 2, Czechoslovakia.