Record Nr. UNINA9910819757903321 **Titolo** Platelets / / editor, Alan D. Michelson Amsterdam,: Elsevier Academic Press, c2007 Pubbl/distr/stampa **ISBN** 1-280-70758-5 9786610707584 0-08-046586-2 Edizione [2nd ed.] Descrizione fisica 1 online resource (1386 p.) Altri autori (Persone) MichelsonAlan D Disciplina 611.0185 612.17 Soggetti Blood platelets Blood platelet disorders Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover; PLATELETS; Copyright page; Table of contents; Contributors: Preface: Foreword: A Brief History of Ideas about Platelets in Health and Disease; Part One: Platelet Biology; CHAPTER 1: The Evolution of Mammalian Platelets; I. Introduction; II. Invertebrates; III. Nonmammalian Vertebrates: IV. Comparative Hemostasis: V. A.

Contributors; Preface; Foreword: A Brief History of Ideas about Platelets in Health and Disease; Part One: Platelet Biology; CHAPTER 1: The Evolution of Mammalian Platelets; I. Introduction; II. Invertebrates; III. Nonmammalian Vertebrates; IV. Comparative Hemostasis; V. A Comparison of Human Platelets and Limulus Amebocytes; VI. The Evolution of Hemostasis and Blood Coagulation; VII. Megakaryocytes and Mammals; VIII. Conclusions; Acknowledgment; References; CHAPTER 2: Megakaryocyte Development and Platelet Formation; IV. Regulation of Megakaryocyte Development and Platelet Formation; V. Murine Model

Megakaryocyte Development and Platelet Formation; V. Murine Model Systems and Human Diseases as Tools to Study Platelet Biogenesis; References; CHAPTER 3: Platelet Structure; I. Introduction; II. Peripheral Zone; III. The Sol-Gel Zone; IV. Organelle Zone; V. Platelet Membrane Systems; References; CHAPTER 4: The Platelet Cytoskeleton; I. Introduction; II. The Structure of the Resting Platelet; III. The Cytoskeleton of the Resting Platelet; IV. The Structure of the Activated Platelet; V. Signals Activating Actin Assembly VI. Membrane Dynamics and Actin Filament Turnover in Platelets VII.

Platelet Contraction: VIII. Diseases of the Platelet Cytoskeleton: References; CHAPTER 5: Platelet Genomics and Proteomics; I. Introduction; II. Platelet Genomics; III. Platelet Proteomics; IV. Overview and Future Directions; Acknowledgment; References; CHAPTER 6: Platelet Receptors; I. Introduction; II. Integrins; III. Leucine-Rich Repeat (LRR) Family; IV. Seven Transmembrane Receptors; V. Immunoglobulin Superfamily; VI. C-Type Lectin Receptor Family; VII. Tetraspanins VIII. Glycosyl Phosphatidylinositol (GPI)-Anchored Proteins IX. Glycosaminoglycan-Carrying Receptors: X. Tyrosine Kinase Receptors: XI. Miscellaneous Platelet Membrane Glycoproteins; Acknowledgment; References; CHAPTER 7: The Glycoprotein Ib-IX-V Complex; I. Introduction/Structure; II. Function; III. Signaling; IV. The End of the Beginning; References; CHAPTER 8: Integrin a IIbb3; I. Introduction; II. allbb3 as an Integrin and a Platelet Protein; III. Structure of allbb3; IV. "Inside-Out" Signaling and allbb3 Activation; V. Conclusion; References; **CHAPTER 9: Thrombin Receptors** I. IntroductionII. Cellular Actions of Thrombin; III. Role of PARs in Disease: IV. Molecular and Developmental Genetics of PARs; V. Thrombin Signaling in Platelets; VI. Development of PAR Inhibitors; References; CHAPTER 10: The Platelet P2 Receptors; I. Introduction; II. Roles of Adenine Nucleotides in Platelet Function: III. P2Y1: IV. P2Y12: V. P2X1; VI. Interplay between the Platelet P2 Receptors; VII. Desensitization of the Platelet P2 Receptors; VIII. Conclusions; References: CHAPTER 11: PECAM-1: I. Introduction: II. PECAM-1 Genomic Organization and Protein Domain Structure III. Expression and Adhesive Properties of the Extracellular Domain

Sommario/riassunto

PLATELETS is the definitive current source of state-of-the-art knowledge about platelets and covers the entire field of platelet biology, pathophysiology, and clinical medicine. Recently there has been a rapid expansion of knowledge in both basic biology and the clinical approach to platelet-related diseases including thrombosis and hemorrhage. Novel platelet function tests, drugs, blood bank storage methods, and gene therapies have been incorporated into patient care or are in development. This book draws all this information into a single, comprehensive and authoritative resource.