

# Contents

*List of Contributors* vii

## Section I Peripheral Blood

- 1 **Peripheral Blood Smear Review** 1  
Satheesh Chonat, Brian Lockhart, Sara Graciaa, Michele E. Paessler
- 2 **Red Blood Cell Disorders** 9  
Sara Graciaa, Michele E. Paessler, Satheesh Chonat
- 3 **Neutrophil and Platelet Disorders** 17  
Satheesh Chonat, Silvia T Bunting, Kristian T. Schafernak, Michele E. Paessler
- 4 **Infectious Diseases and Nutritional Deficiencies** 26  
Satheesh Chonat, Sara Graciaa, Silvia T Bunting

## Section II Normal and Non-neoplastic Hematolymphoid Diseases

- 5 **Benign Non-neoplastic Noninfective Lymphadenopathy** 31  
Dehua Wang, Shunyou Gong
- 6 **Normal Bone Marrow Components in Pediatric Patients** 42  
Karen M. Chisholm, Gerald Wertheim
- 7 **Infectious Diseases** 52  
Shunyou Gong, Dehua Wang, Kristian T. Schafernak

## Section III Mature Lymphoid Neoplasm

- 8 **Mature B-Cell Non-Hodgkin Lymphoma** 65  
Xiayuan Liang, Billie Carstens
- 9 **Mature T-Cell and NK-Cell Non-Hodgkin Lymphomas** 78  
Xiayuan Liang, Billie Carstens

- 10 **Hodgkin Lymphoma** 90  
Xiayuan Liang
- 11 **Posttransplant Lymphoproliferative Disorder** 98  
Xiayuan Liang
- 12 **Immunodeficiency-Associated Lymphoproliferative Disorders** 106  
Michele E. Paessler, Brian Lockhart, Soma Jyonouchi

## Section IV Precursor Hematopoietic Neoplasms and Related Neoplasms

- 13 **Precursor Lymphoblastic Leukemia/Lymphoma** 127  
Virginia Knez, Billie Carstens, Xiayuan Liang
- 14 **Blastic Plasmacytoid Dendritic Cell Neoplasm** 140  
Stephanie D. Schniederjan, Aurelia Meloni-Ehrig, Caroline An, Kristian T. Schafernak
- 15 **Acute Myeloid Leukemia and Related Precursor Neoplasms** 147  
Virginia Knez, Xiayuan Liang, Billie Carstens, Silvia T Bunting
- 16 **Myeloproliferative Neoplasms** 176  
Tracy I. George, Karen M. Chisholm
- 17 **Myelodysplastic/Myeloproliferative Neoplasms** 186  
Kristian T. Schafernak, Rachel A. Mariani, Nicole Arva, Jeffrey Jacobsen, Katherine R. Calvo
- 18 **Childhood Myelodysplastic Syndrome** 198  
Alina Dulau-Florea, Nisha Patel, Kristian T. Schafernak, Katherine R. Calvo

## Contents

- 19 **Germline Predisposition to Myeloid Neoplasia** 207  
Katherine R. Calvo, Nisha Patel, Alina Dulau-Florea, Kristian T. Schafernak
- 20 **Germline Predisposition to Lymphoid Neoplasm** 230  
Katherine R. Calvo, Nisha Patel, Alina Dulau-Florea, Kristian T. Schafernak
- 21 **Mastocytosis and Myeloid Lymphoid Neoplasms with Eosinophilia** 247  
Karen M. Chisholm, Tracy I. George

**Section V Histiocytic Neoplasm and Miscellaneous Bone Marrow Diseases**

- 22 **Histiocytic Lesions** 257  
Kudakwashe Chikwava
- 23 **Bone Marrow Manifestations of Systemic Diseases** 270  
Kristian T. Schafernak, Rachel A. Mariani, Nicole Arva, Jeffrey Jacobsen, Katherine R. Calvo

---

*Index* 291