

---

# Contents

<i>Preface</i> . . . . .	<i>vii</i>
<i>Contributors</i> . . . . .	<i>xi</i>

## PART I

1 Gross Examination . . . . .	3
<i>Stephen A. Geller and Richard E. Horowitz</i>	
2 The Pathologist's Guide to Fixatives . . . . .	21
<i>Kiran Qidwai, Michelle Afkhami, and Christina E. Day</i>	
3 Tissue Processing and Hematoxylin and Eosin Staining . . . . .	31
<i>Ada T. Feldman and Delia Wolfe</i>	
4 Light Microscope Alignment Methods . . . . .	45
<i>Robert Bagnell</i>	
5 Immunohistochemistry in Surgical Pathology: Principles and Practice . . . . .	81
<i>Clive R. Taylor</i>	
6 Optimizing Direct Immunofluorescence . . . . .	111
<i>Ian D. Odell and Deborah Cook</i>	
7 Electron Microscopy: A Brief History and Review of Current Clinical Application . . . . .	119
<i>Ronald E. Gordon</i>	
8 A Practical Approach to Clinical and Research Biobanking . . . . .	137
<i>William H. Yong, Sarah M. Dry, and Maryam Shabibkhani</i>	

## PART II

9 Hospital Autopsy Performance and Reporting . . . . .	165
<i>Jacqueline Benjamin</i>	
10 Characterization of HER2 Status by Fluorescence In Situ Hybridization (FISH) and Immunohistochemistry (IHC) . . . . .	181
<i>Oliver A. Press, Roberta Guzman, Monica Cervantes, Angela Santiago, and Michael F. Press</i>	
11 Intraoperative Frozen Section Consultation in Gynecologic Pathology . . . . .	209
<i>Fabiola Medeiros and Juan C. Felix</i>	
12 Processing Dermatological Biopsies . . . . .	221
<i>Gene Kim, Brittney DeClerck, and Eric Sorenson</i>	
13 Human Papillomavirus Testing in Head and Neck Squamous Cell Carcinoma: Best Practice for Diagnosis . . . . .	237
<i>Andrew Schache, James Croud, Max Robinson, and Selvam Thavaraj</i>	

14	Peripheral Blood Smears, Bone Marrow Aspiration, Trephine and Clot Biopsies: Methods and Protocols . . . . .	257
	<i>Michelle Afkhami, Maria Vergara-Lluri, Russell K. Brynes, and Imran N. Siddiqi</i>	
15	Processing the Lymph Node Biopsy . . . . .	271
	<i>Eric Loo and Imran N. Siddiqi</i>	
16	Handling and Interpretation of Heart Transplant Biopsies. . . . .	283
	<i>Eric Swanson and W. Dean Wallace</i>	
17	Handling and Interpretation of Lung Transplant Biopsies . . . . .	293
	<i>Eric Swanson and W. Dean Wallace</i>	
18	Liver: Tissue Handling and Evaluation . . . . .	303
	<i>Stephen A. Geller</i>	
19	Handling and Interpretation of the Medical Renal Biopsy . . . . .	323
	<i>Michael N. Koss</i>	
20	Optimizing Prostate Specimen Handling for Diagnosis and Prognosis . . . . .	337
	<i>David G. Bostwick, Christina E. Day, and Isabelle Meiers</i>	
21	Optimal Handling of Bone Tumor Specimens . . . . .	353
	<i>Leslie G. Dodd, Shi Wei, and Gene P. Siegal</i>	
22	CNS Intraoperative Consultation: A Survival Guide for Non-neuropathologists . . . . .	369
	<i>Jesse Lee Kresak, Marie Rivera-Zengotita, Robin M. Foss, and Anthony T. Yachnis</i>	
23	Examining and Processing Eye Specimens . . . . .	377
	<i>Amir A. Azari, Nasreen A. Syed, and Daniel M. Albert</i>	
24	Optimizing the Skeletal Muscle Biopsy . . . . .	397
	<i>Karen M. Weidenheim</i>	
	<i>Index . . . . .</i>	<i>411</i>

Histopathology

Methods and Protocols

Day, C.E. (Ed.)

2014, XIII, 416 p. 93 illus., 55 illus. in color., Hardcover

ISBN: 978-1-4939-1049-6

A product of Humana Press