

# **TABLE OF CONTENTS**

**Section I|2 pages**

**Concepts in Drug Development**

**chapter 1|24 pages**

**Overview of Drug Development**

ByJames A. Popp, Jeffery A. Engelhardt

**chapter 2|38 pages**

**Nonclinical Safety Evaluation of Drugs**

ByThomas M. Monticello, Jeanine L. Bussiere

**chapter 3|30 pages**

**Nonclinical Safety Evaluation of Advanced Therapies**

ByTimothy K. MacLachlan, Kendall S. Frazier, Mercedes Serabian

**chapter 4|58 pages**

**Nonclinical Safety Evaluation of Medical Devices**

ByKathleen A. Funk, Victoria A. Hampshire, JoAnn C. L. Schuh

**chapter 5|24 pages**

**Pathology and the Pathologist in Pharmaceutical Research and Development**

ByPage R. Bouchard, Christopher J. Clarke, Dominique Brees

**chapter 6|38 pages**

**Routine and Special Techniques in Toxicologic Pathology**

ByDaniel J. Patrick, Matthew L. Renninger, Peter C. Mann

**chapter 7|54 pages**

**Principles of Clinical Pathology**

ByNiraj K. Tripathi, Jacqueline M. Tarrant

**chapter 8|24 pages**

**chapter 9|38 pages**

### **Toxicogenomics in Toxicologic Pathology**

ByArun R. Pandiri, David E. Malarkey, Mark J. Hoenerhoff

**chapter 10|56 pages**

### **Spontaneous Lesions in Control Animals Used in Toxicity Studies**

ByRobert C. Johnson, Robert H. Spaet, Gitte Jeppesen, Ursula Junker, Robert Stull

**section Section II|2 pages**

#### **Organ Systems**

**chapter 11|62 pages**

#### **Gastrointestinal Tract**

ByJudit E. Markovits, Graham R. Betton, Donald N. McMartin, Theresa Boulineau

**chapter 12|64 pages**

#### **Liver, Gallbladder, and Exocrine Pancreas**

ByRussell C. Cattley, James A. Popp, Steven L. Vonderfecht

**chapter 13|54 pages**

#### **Respiratory System**

ByTom P. McKevitt, David J. Lewis

**chapter 14|70 pages**

#### **Urinary System**

ByKendall S. Frazier, John Curtis Seely

**chapter 15|32 pages**

#### **Hematopoietic System**

ByKristin Henson, Tanasa Osborne, Gregory S. Travlos

**chapter 16|44 pages**

### **The Lymphoid System**

ByPatrick J. Haley

**chapter 17|28 pages**

### **Bone, Muscle, and Tooth**

ByJohn L. Vahle, Joel R. Leininger, Philip H. Long, D. Greg Hall, Heinrich Ernst

**chapter 18|84 pages**

### **The Cardiovascular System**

ByCalvert Louden, David Brott, Chidozie J. Amuzie, Bindu Bennet, Ronnie Chamanza

**chapter 19|62 pages**

### **Endocrine Glands**

ByRichard A. Peterson, Sundeep Chandra, Mark J. Hoenerhoff

**chapter 20|132 pages**

### **Reproductive System and Mammary Gland**

ByJustin D. Vidal, Charles E. Wood, Karyn Colman, Katharine M. Whitney, Dianne M. Creasy

**chapter 21|72 pages**

### **Skin**

ByZbigniew W. Wojcinski, Lydia Andrews-Jones, Daher Ibrahim Aibo, Rie Kikkawa, Robert Dunstan

**chapter 22|40 pages**

### **Nervous System**

ByMark T. Butt, Aly Bradley, Robert Sills

**chapter 23|42 pages**

## **Special Senses**

Eye and Ear

By Kenneth A. Schafer, Oliver C. Turner, Richard A. Altschuler.