TABLE OF CONTENTS

Section 1: The Real Basics of Veterinary Medicine

- 1. The Medical History
- 2. The Physical Examination of the Dog and Cat
- 3. Basic Genetics
- 4. Clinical Genomics
- 5. Evidence-Based Medicine
- 6. Biomedical Statistics: Selected Topics
- 7. Euthanasia

Section 2: Differential Diagnosis for Chief Complaints

- 8. ADR
- 9. Distinguishing Behavioral Disorders from Medical Disorders
- 10. Dermatologic Manifestations of Systemic Disease
- 11. Ophthalmic Manifestations of Systemic Disease
- 12. Neurologic Manifestations of Systemic Disease
- 13. Intoxication Versus Acute, Nontoxicologic Illness: Differentiating the Two
- 14. Orthopedic Manifestations of Systemic Disease
- 15. Swollen Joints and Joint Pain
- 16. Weight Gain
- 17. Abdominal Enlargement
- 18. Peripheral Edema
- 19. Weight Loss as a Chief Complaint
- 20. Failure to Grow
- 21. Weakness

- 22. Restlessness
- 23. Anorexia
- 24. Polyphagia
- 25. Body Odors Cardiorespiratory
- 26. Coughing
- 27. Sneezing and Nasal Discharge
- 28. Tachypnea, Dyspnea, and Respiratory Distress
- 29. Epistaxis and Hemoptysis
- 30. Syncope Neurologic
- 31. Movement Disorders
- 32. Tremors
- 33. Ataxia, Paresis, Paralysis
- 34. Stupor and Coma
- 35. Seizures Gastrointestinal
- 36. Halitosis and Ptyalism
- 37. Gagging
- 38. Dysphagia
- 39. Vomiting and Regurgitation
- 40. Diarrhea
- 41. Melena and Hematochezia
- 42. Constipation, Tenesmus, Dyschezia, and Fecal Incontinence
- 43. Flatulence Urogenital
- 44. Vulvar and Preputial Discharge
- 45. Polyuria and Polydipsia
- 46. Pollakiuria, Stranguria, and Urinary Incontinence

47. Hematuria and Other Conditions Causing Discolored Urine

Section 3: Differential Diagnosis for Physical Examination Abnormalities

- 48. Fever
- 49. Hypothermia
- 50. Pallor
- 51. Hyperemia
- 52. Cyanosis
- 53. Jaundice
- 54. Petechiae and Ecchymoses
- 55. Abnormal Heart Sounds and Heart Murmurs
- 56. Pulse Alterations

Section 4: Differential Diagnosis for Clinicopathologic Abnormalities

- 57. Anemia, Erythrocytosis
- 58. Leukopenia, Leukocytosis
- 59. Thrombocytopenia, Thrombocytosis
- 60. Hypo-/Hyperproteinemia
- 61. Hypo-/Hyperglycemia
- 62. Blood Urea Nitrogen and Creatinine
- 63. Cholesterol, Triglycerides
- 64. Amylase, Lipase
- 65. Liver Enzymes
- 66. Creatine Kinase
- 67. Sodium, Chloride
- 68. Potassium, Magnesium

- 69. Calcium, Phosphorus
- 70. Lactate
- 71. Ammonia
- 72. Urinalysis
- 73. Urinary Electrolyte Concentrations
- 74. Fluid Analysis: Thoracic, Abdominal, Joint

Section 5: Techniques

General

- 75. Venous and Arterial Puncture
- 76. Jugular Catheterization and Central Venous Pressure Measurement
- 77. Intraosseous Catheters
- 78. Constant Rate Infusions
- 79. Ear Vein Blood Glucose Monitoring
- 80. Buccal Mucosal Bleeding Time
- 81. Fecal Examination
- 82. Nasoesophageal, Esophagostomy, Gastrostomy, and Jejunal Tube Placement Techniques
- 83. Care of Endoscopic Equipment
- 84. Hyperbaric Medicine Skin
- 85. Otoscopy, Ear Flushing, and Myringotomy
- 86. Scrapings, Fine-Needle Aspirations, and Biopsies of Skin and Subcutaneous Tissues
- 87. Cytology of the Skin and Subcutaneous Tissues Abdomen
- 88. Abdominal Ultrasonography
- 89. Abdominal Ultrasound: Aspirations and Biopsies
- 90. Abdominocentesis and Diagnostic Peritoneal Lavage

- 91. Laparoscopy General Centesis and Biopsy
- 92. Bone Marrow Aspiration and Biopsy
- 93. Cytology of Internal Organs
- 94. Arthrocentesis and Arthroscopy
- 95. Lymph Node Aspiration and Biopsy
- 96. Rhinoscopy, Nasal Flush, and Biopsy Respiratory/Cardiovascular
- 97. Respiratory and Inhalant Therapy
- 98. Pulse Oximetry
- 99. Blood Pressure Measurement
- 100. Chest Tube Placement
- 101. Transtracheal Wash and Bronchoscopy
- 102. Thoracocentesis/Pericardiocentesis
- 103. Electrocardiography
- 104. Echocardiography Renal/Urinary/Prostatic
- 105. Urine Collection
- 106. Management of Urinary Catheters
- 107. Unblocking of the Urethra
- 108. Cystoscopy and Urethroscopy
- 109. Peritoneal Dialysis
- 110. Continuous Renal Replacement Therapy/Hemodialysis
- 111. Prostatic Diagnostic Techniques Gastrointestinal
- 112. Gastric Intubation and Lavage
- 113. Gastrointestinal Endoscopy
- 114. Enemas and Deobstipation Neurologic
- 115. Cerebrospinal Fluid Collection, Analysis, and Myelography

- 116. Muscle and Nerve Biopsy
- 117. Electromyography, Nerve Conduction Velocity Reproductive
- 118. Artificial Insemination in the Dog
- 119. Vaginoscopy and Vaginal Cytology

Section 6: Minimally-Invasive Interventional Therapies

- 120. Overview of Interventional Medicine
- 121. Respiratory Interventional Therapies
- 122. Cardiovascular Interventional Therapies
- 123. Gastrointestinal Interventional Therapies
- 124. Urologic Interventional Therapies
- 125. Neoplastic Interventional Therapies

Section 7: Critical Care

- 126. Pain Physiology, Identification and Management in the Acute Care Setting
- 127. Shock
- 128. Acid-Base, Oximetry, and Blood Gas Analysis
- 129. Crystalloid and Colloid Fluid Therapy
- 130. Blood Transfusions, Component Therapy, and Oxygen-Carrying Solutions
- 131. Oxygen Therapy
- 132. Sepsis and the Systemic Inflammatory Response Syndrome
- 133. The Endocrine Response to Critical Illness
- 134. Heatstroke
- 135. Hemorrhage
- 136. Status Epilepticus
- 137. 137. Systemic Anaphylaxis
- 138. 138. Sedation and Anesthesia in Critical Care

- 139. 139. Initial Evaluation of Respiratory Emergencies
- 140. Cardiopulmonary Arrest and CPR
- 141. Cardiac Emergencies
- 142. Diabetic Ketoacidosis and Hyperglycemic Hyperosmolar Syndrome
- 143. Acute Abdomen
- 144. Gastrointestinal Emergencies
- 145. Hepatic and Splenic Emergencies
- 146. Reproductive Emergencies
- 147. Global Approach to the Trauma Patient
- 148. Head Trauma
- 149. Thoracic Trauma
- 150. Urinary Tract Trauma

Section 8: Toxicology

- 151. Toxin Exposure Therapy/Decontamination
- 152. Chemical Toxicoses
- 153. Prescription and Over-the-Counter Drug Toxicoses
- 154. Recreational Drug Toxicoses
- 155. Plant Toxicoses
- 156. Venomous Bites and Stings (Zootoxicoses)

Section 9: Blood Pressure

- 157. Pathophysiology and Clinical Features of Systemic Hypertension
- 158. Treatment of Systemic Hypertension
- 159. Systemic Hypotension

Section 10: Therapeutic Considerations in Medicine and Disease

- 160. Principles of Drug Disposition and Pharmacokinetics
- 161. Antibacterial Drug Therapy
- 162. Antifungal and Antiviral Therapy
- 163. Antiparasitic Therapy
- 164. Anti-inflammatory Therapy
- 165. Immunosuppressive Therapy
- 166. Analgesic Therapy
- 167. Antioxidants, Nutraceuticals, Probiotics, and Nutritional Supplements
- 168. Compounding Drugs
- 169. Adverse Drug Reactions

Section 11: Dietary Considerations.