

## **Section 1: Introduction**

- 1. The Practice of Pediatric Anesthesia*
- 2. Growth and Development*
- 3. Perioperative Behavior Stress in Children*
- 4. Preoperative Evaluation, Premedication, and Induction of Anesthesia*
- 5. Ethical Issues in Pediatric Anesthesiology*

## **Section 2: Drug and Fluid Therapy**

- 6. Pharmacogenomics*
- 7. Pharmacokinetics and Pharmacology of Drugs Used in Children*
- 8. Total Intravenous Anesthesia and Target-Controlled Infusion*
- 9. Fluid Management*
- 10. Essentials of Hematology*
- 11. Perioperative Management of the Oncology Patient*
- 12. Strategies for Blood Product Management and Reducing Transfusions*

## **Section 3: The Chest**

- 13. Essentials of Pulmonology*
- 14. The Pediatric Airway*
- 15. Anesthesia for Thoracic Surgery*

## **Section 4: The Heart**

- 16. Essentials of Cardiology*
- 17. Anesthesia for Children Undergoing Heart Surgery*
- 18. Cardiac Physiology and Pharmacology*
- 19. Cardiopulmonary Bypass and Management*
- 20. Medications for Hemostasis*
- 21. Mechanical Circulatory Support*

*22. Interventional Cardiology*

*23. Anesthesia for Non-cardiac Surgery in Children with Congenital Heart Disease*

**Section 5: The Brain and Glands**

*24. Essentials of Neurology and Neuromuscular Diseases*

*25. Surgery, Anesthesia, and the Immature Brain*

*26. Pediatric Neurosurgical Anesthesia*

*27. Essentials of Endocrinology*

**Section 6: The Abdomen**

*28. Essentials of Nephrology*

*29. General Abdominal and Urologic Surgery*

*30. Essentials of Hepatology*

*31. Organ Transplantation*

**Section 7: Other Surgeries**

*32. Orthopedic and Spine Surgery*

*33. Otorhinolaryngologic Procedures*

*34. Ophthalmology*

*35. Plastic and Reconstructive Surgery*

*36. Burn Injuries*

**Section 8: Emergencies**

*37. The Extremely Premature Infant (Micropremie) and Neonatal Emergencies*

*38. Fetal Intervention and the EXIT Procedure*

*39. Trauma*

*40. Cardiopulmonary Resuscitation*

*41. Malignant Hyperthermia*

**Section 9: Pain**

*42. Regional Anesthesia*

*43. Ultrasound Guided Regional Anesthesia*

*44. Acute Pain*

*45. Chronic Pain*

**Section 10: Special Topics**

*46. Anesthesia Outside the Operating Room*

*47. The Postanesthesia Care Unit and Beyond*

*48. Sedation for Diagnostic and Therapeutic Procedures Outside the Operating Room*

*49. Procedures for Vascular Access*

*50. Infectious Disease Considerations for the Operating Room*

*51. Pediatric Anesthesia in Developing Countries*

*52. Pediatric Equipment*

*53. Simulation*