

# Contents

- 1 The Biology of Dental Pulp and Periradicular Tissues, 1**  
*Graham Rex Holland, Mahmoud Torabinejad*
- 2 Protecting the Pulp and Promoting Tooth Maturation, 21**  
*Ashraf F. Fouad, Anthony J. Smith*
- 3 Endodontic Microbiology, 37**  
*José F. Siqueira, Jr., Ashraf F. Fouad*
- 4 Pulp and Periapical Pathosis, 48**  
*Mahmoud Torabinejad, Shahrokh Shabahang*
- 5 Diagnosis, Treatment Planning, and Systemic Considerations, 68**  
*Richard E. Walton, Ashraf F. Fouad*
- 6 Interaction between the General Dentist and the Endodontist, 95**  
*Ashraf F. Fouad, Mahmoud Torabinejad*
- 7 Endodontic-Periodontic Interrelationship, 106**  
*Mahmoud Torabinejad, Ilan Rotstein*
- 8 Longitudinal Tooth Fractures, 121**  
*Eric M. Rivera, Richard E. Walton*
- 9 Local Anesthesia, 142**  
*Al Reader, John M. Nusstein, Richard E. Walton*
- 10 Endodontic Emergencies and Therapeutics, 162**  
*Paul D. Eleazer, Paul A. Rosenberg*
- 11 Management of Traumatic Dental Injuries, 172**  
*Nestor Cohenca*
- 12 Endodontic Radiography, 198**  
*Richard E. Walton, Ashraf F. Fouad*
- 13 Endodontic Instruments, 218**  
*Van T. Himel, Kent A. Sabey*
- 14 Internal Anatomy, 230**  
*Richard E. Walton, Eric J. Herbranson*
- 15 Isolation, Endodontic Access, and Length Determination, 244**  
*William T. Johnson, Anne E. Williamson*
- 16 Cleaning and Shaping, 273**  
*Ove A. Peters, W. Craig Noblett*
- 17 Preparation for Restoration, 301**  
*Charles J. Goodacre, Harold H. Messer*
- 18 Obturation, 316**  
*James C. Kulild, Bekir Karabucak*
- 19 Procedural Accidents, 338**  
*Mahmoud Torabinejad, James D. Johnson*
- 20 Retreatment, 355**  
*George Bogen, Robert Handysides*
- 21 Endodontic Surgery, 376**  
*Mahmoud Torabinejad, Bradford R. Johnson*
- 22 Evaluation of Endodontic Outcomes, 397**  
*Mahmoud Torabinejad, Shane N. White*
- 23 Single Implant, 412**  
*Mohammad A. Sabeti, Mahmoud Torabinejad*
- 24 Bleaching Discolored Teeth, 428**  
*Ilan Rotstein, Richard E. Walton*
- 25 Geriatric Endodontics, 441**  
*Richard E. Walton*
- Appendix  
Pulpal Anatomy and Access Preparations, 455**  
*Lisa R. Wilcox*
- Index, 471**