Mineralized Tissues in Oral and Craniofacial Science: Biological Principles and Clinical Correlates

A major comprehensive update on knowledge in the field of mineralized tissues in the oral and craniofacial region.

Drs. McCauley and Somerman assembled an international team of researchers and clinicians, offering a global perspective on the current knowledge in this field. Basic and clinical correlates reinforce the significance of research to clinical diagnoses and therapies, written in a manner that lends easily to their use for case study teaching venues.

Section 1 features the many aspects of bone in the craniofacial region, including embryology, cell biology, and stem cell biology. Section 2 focuses on teeth-tooth development, dentin, enamel, cementum, and tooth regeneration. Section 3 discusses the interaction between bones and teeth, including those associated with inflammatory processes, periodontal ligaments, biomechanics, and other impact factors-such as nutrition, metabolic bone diseases and therapeutic modalities.

The novel approach of linking the basic principles of the cell and molecular biology of hard tissues to clinical correlates will appeal to readers at all levels of their research careers, both students and faculty; faculty interested in a comprehensive text for reference; and clinicians interested in the biologic aspects of bones and teeth.