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 ""Chapter 10: Mechanisms that Regulate Normal Bone Mineral Deposition: A Hypothesis on the Role of Antagonistic Pathways in Preventing Hypo- and Hyper-Mineralization""; ""Chapter 11: In Vitro Differentiation and Matrix Vesicle Biogenesis in Primary Cultures of Rat Growth Plate Chondrocytes""; ""Chapter 12: Growth Plate Proteins and Biomineralization""  
 ""Chapter 13: Regulated Production of Mineralization-Competent Matrix Vesicles by Terminally Differentiated Chondrocytes""  
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 ""Chapter 19: RUNX2/CBFA1 Mutations in Cleidocranial Dysplasia: Phenotypic and Structure/Function Correlations""  
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## Sommario/riassunto

Evidence generated by a number of genetic studies indicates that growth is regulated by a number of genes and that interference with their expression can have catastrophic effects on the well being of the whole organism. With the realization that multiple regulatory pathways exist, work is now focusing on identification of those signals that control the activity of the cells in the epiphyseal growth plate. A group of individuals included dental and orthopaedic researchers examining the regulation of craniofacial growth and mineralization. The molecular biologists are probing skeletal morphogenesis