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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- BMPs: Historic and Future Perspectives -- BMP – Biology -- BMPs in Development -- BMP signaling -- BMP Antagonists - Biology -- BMP and BMP Antagonists - Structure and Function -- BMPs in Orthopaedic Medicine: Promises and Challenges -- BMP6 and Bone Repair -- BMPs in Dental Medicine: Promises and Challenges -- BMPs in Spine -- BMPs in Articular Joints -- BMP Signaling & FOP -- BMP-7 Biology and its Therapeutic Utility for Chronic Kidney Diseases -- BMPs in Inflammation -- BMPs and Angiogenesis -- BMP Signaling in Iron Homeostasis -- BMP Signaling in Pulmonary Arterial Hypertension -- BMP Signaling and Cancer -- BMP Biology in Rare Diseases.
Sommario/riassunto	This book focuses on the salient features of the biology of Bone Morphogenetic Proteins and the advances in our understanding of their structure and function and of downstream signaling, as well as their

governance in systems biology from bone and dentin to kidney, cancer, diabetes, iron homeostasis and angiogenesis, including rare musculoskeletal disorders. BMPs, also referred to as growth and differentiation factors, are members of the TGF-beta superfamily and are highly conserved from fruit flies to mammals and are responsible for the formation of practically every organ during embryo development and involved in adult tissue injury and repair. BMPs establish their extracellular gradient by interacting with their respective antagonists and regulate their function through SMAD-dependent down-stream signaling effector genes. This volume is aimed at scientists and professionals dealing with metabolic disorders, nutrition, systems biology diseases, rare musculoskeletal conditions, and disorders related to iron metabolism, including anemia of chronic disease, hereditary hemochromatosis and beta thalassemia.
