This volume presents manuscripts stemming from the 4th New York Skeletal Biology and Medicine Conference, held at Mount Sinai School of Medicine in New York City on April 27–30, 2011. The papers included in this volume include two of the topic areas presented at the conference; the other topic areas are included in Skeletal Biology and Medicine I. The volume features current basic, clinical, and translational research on aspects of skeletal morphogenesis and remodeling in health and disease. Papers survey vital new insights into the mechanisms of bone development and restructuring, including cellular and mechanical triggers, receptors and signaling pathways. Also covered are the effects of other physiological systems and disease states, such as immune system inflammation, diabetes, infection, and cancer on musculoskeletal health. Recent findings are shaping therapeutic directions that focus on both anti-resorptive and anabolic therapies.

Basic scientists, clinical investigators, and clinicians with interests spanning endocrinology, physiology, cell biology, pathology, genetics, molecular biology, rheumatology, oncology, and other areas that relate to bone development and homeostasis will find this a valuable resource for the most recent developments in skeletal biology and medicine.