

骨と関節の先端疾患分子医科学 (Advanced Bone and Joint Science: ABJS)

骨・軟骨疾患の先端的分子病態生理学の国際的拠点形成・セミナー

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(2004年12月4日 土曜日 13時－17時 米国細胞生物学会におけるサブグループ開催)

**Advances in Signaling Pathways Regulating Cellular Interactions
for Bone Formation**

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The American Society for Cell Biology 44th Annual Meeting

Development and continued remodeling of the skeleton is supported by signaling factors that mediate molecular interactions among heterogeneous cell populations that include stem cells, chondrocytes, osteoblasts and osteoclasts. Epigenetic control mechanisms, cytokine actions, morphogenetic and cell type specification factors, ECM-integrin actions in the control of cell behavior and the cellular response to mechanical stimuli are among the leading issues in bone cell biology. The session will provide several examples of the most advanced topics that have defined a regulatory network for formation of skeletal integrity and include talks on stem cell lineage commitment and transcriptional control mechanisms, Wnt signaling in cartilage and bone, Src tyrosine kinase and RANKL for crosstalk between osteoblasts and osteoclasts; specialized ECM proteins and integrins signals for differentiation and mechanical response.