

1096-VG-1795 **Jason M Graham*** (jason.graham@scranton.edu), 204 Monroe Ave, Scranton, PA 18510, and
Bruce P Ayati, Sarah A Holstein and **James A Martin**. *The Dynamics of Bone Turnover*.

Bone, like all other organs of the body, constantly and continuously undergoes change. The process responsible for most of this change in a mature skeleton is known as bone remodeling. Bone remodeling involves dynamic interactions of two distinct classes of specialized cells, and is activated and regulated via complex biochemical signaling. Moreover, irregular bone remodeling is associated with several prominent diseases. In this talk we briefly describe the cell signaling network that underlies bone remodeling, focusing on some recent work toward developing a mathematical and computational framework for investigating the dynamics of bone turnover. (Received September 16, 2013)