Bone Cells and their Involvement in Bone Cancer Pain Sensation

Mrs. Boggs
Bone

• Bone is a rigid organ that provides the body with structure, support, and functions in movement.
• Blood cells are made in bone.

http://academic.kellogg.cc.mi.us/herbrandsonc/bio201_McKinley/skeletal.htm

http://www.umm.edu/bone/bone.htm
Bone Cancer (Osteosarcoma)

• Osteosarcoma arises in the mineralized tissue in the bone
• Bone is a secondary site of metastasis for prostate cancer, breast cancer, and lung cancer
• Biggest problem with bone cancer is the pain and standard of living

http://www.lmp.ualberta.ca/resources/pathoimages/Images-G/000p043j.jpg
Studying Bone Cancer Pain

• How is pain associated with bone cancer sensed by the brain?
• Osteocytes come in close association with nerves that enter the bone
• Do Osteocytes and nerves “talk”? When someone has bone cancer, do Osteocytes send constant pain signals to nerves?


http://www.tiho-hannover.de/einricht/botanik/forschung/projekte.htm
Studying Osteocyte and Nerves Communication