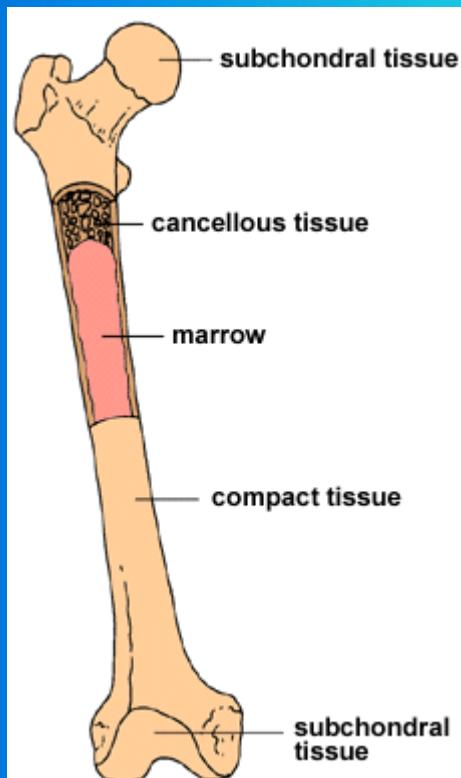


Bone Cells and their
Involvement in Bone Cancer
Pain Sensation

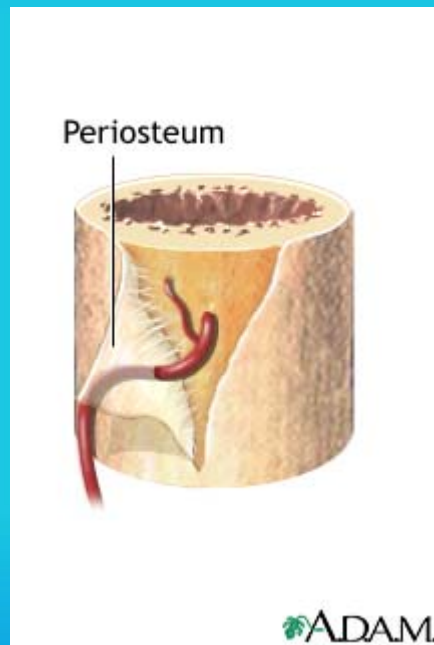
Mrs. Boggs

Bone

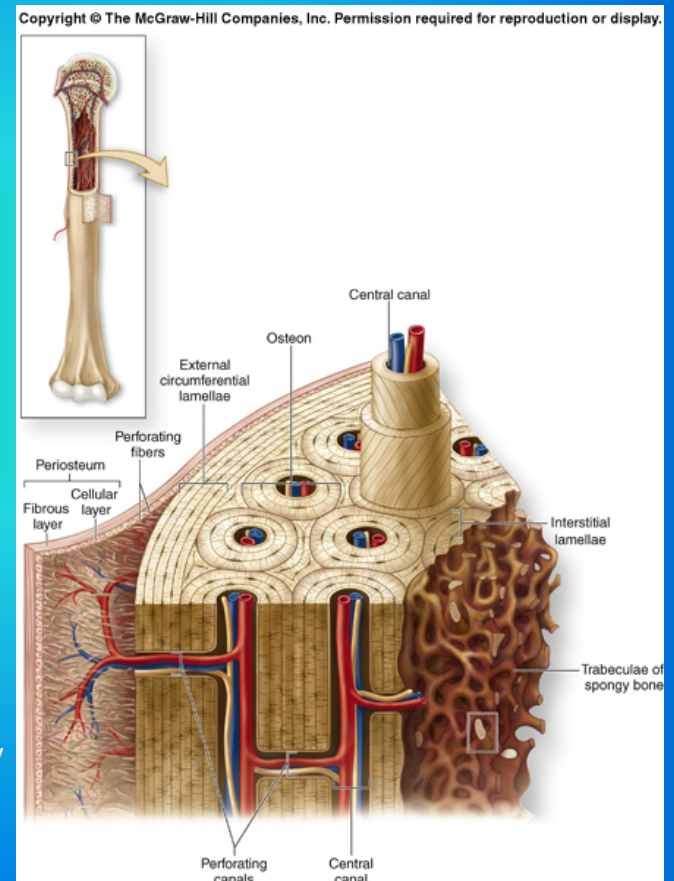
- Bone is a rigid organ that provides the body with structure, support, and functions in movement.
- Blood cells are made in bone.



<http://www.umm.edu/bone/bone.htm>



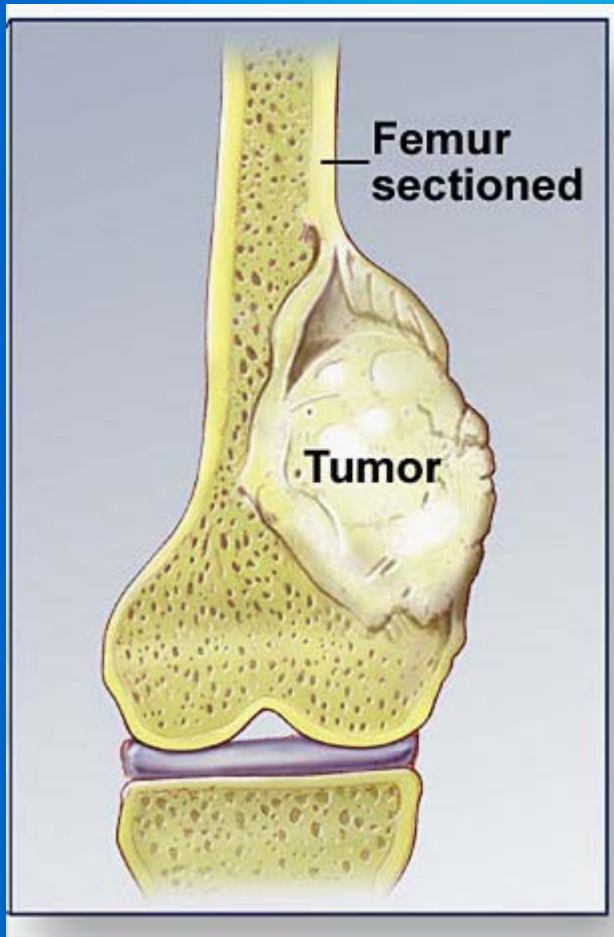
<http://www.nlm.nih.gov/medlineplus/ency/imagepages/9734.htm>



http://academic.kellogg.cc.mi.us/herbrandsonc/bi0201_McKinley/skeletal.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

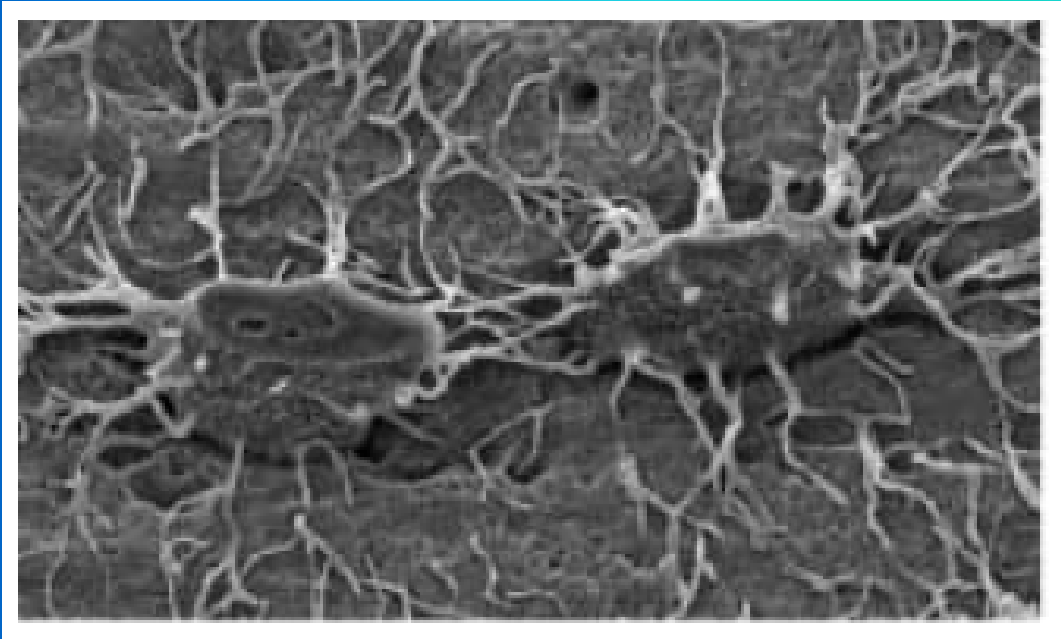


<http://www.lmp.ualberta.ca/resources/pathoi mages/Images-G/000p043j.jpg>

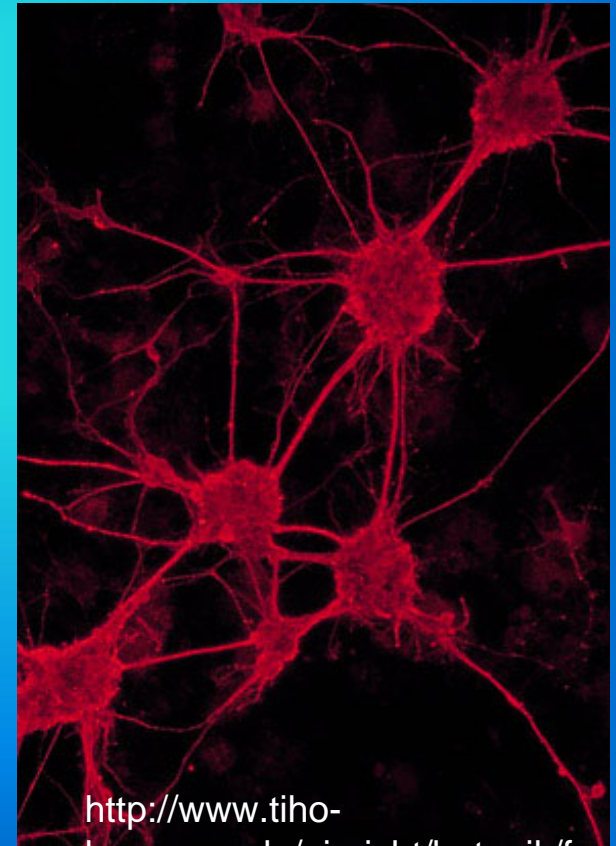
Studying Bone Cancer Pain

- 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?



Bonewald (2005) J Musculoskelet Neuronal Interact 5(4):321-324



<http://www.tiho-hannover.de/einricht/botanik/forschung/projekte.htm>

Studying Osteocyte and Nerves Communication

