

Bone and Bone Cancer Pain

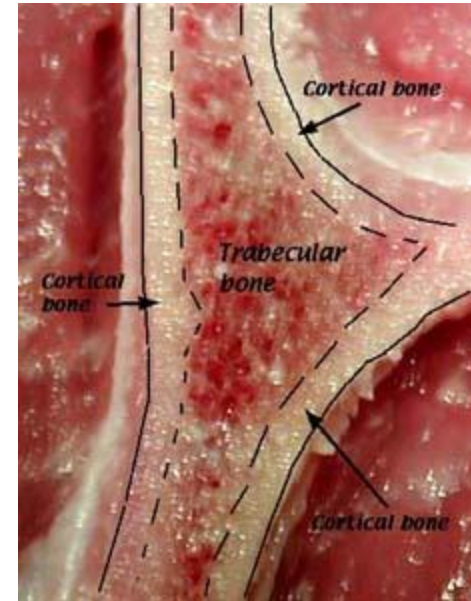
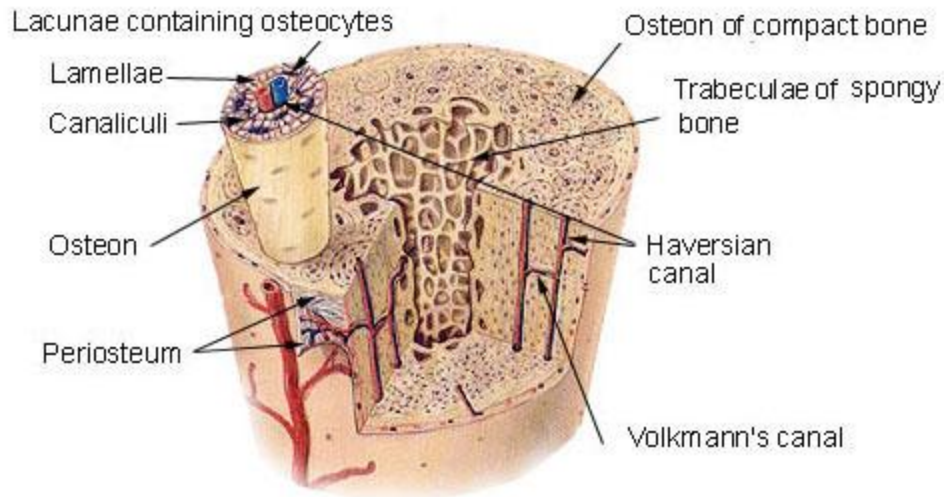
Mrs. Boggs

Bone

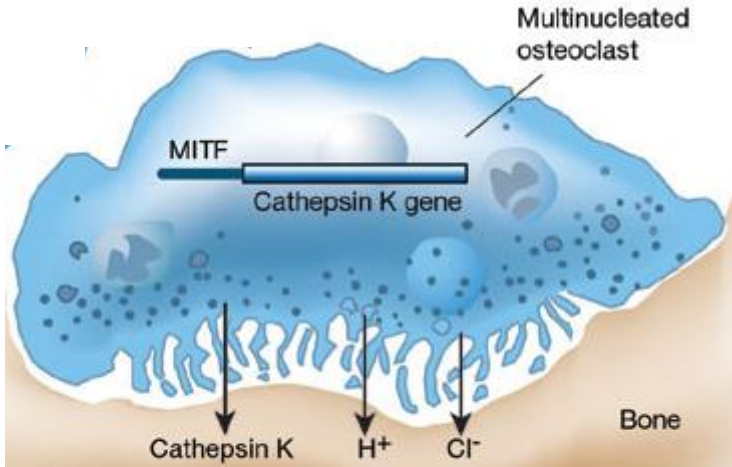
Function:

- Structure
- Organ support
- Mineral storage

Compact Bone & Spongy (Cancellous Bone)



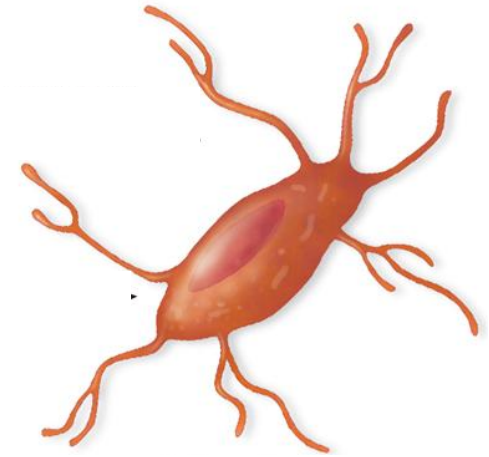
Bone Cells



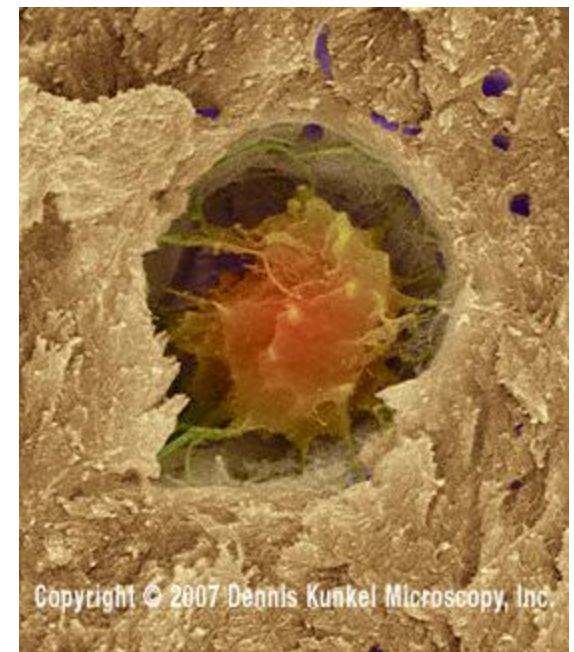
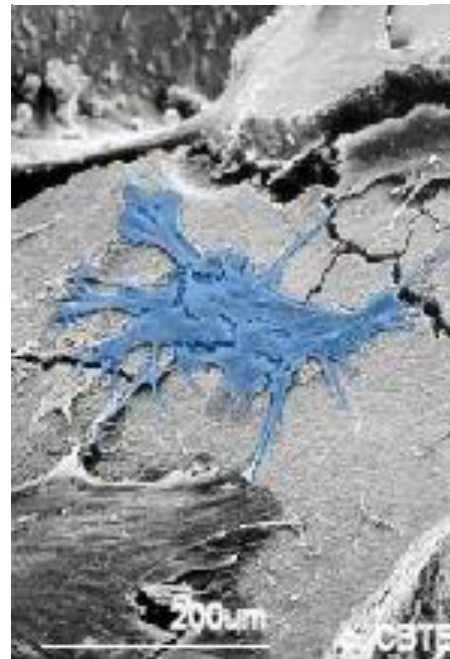
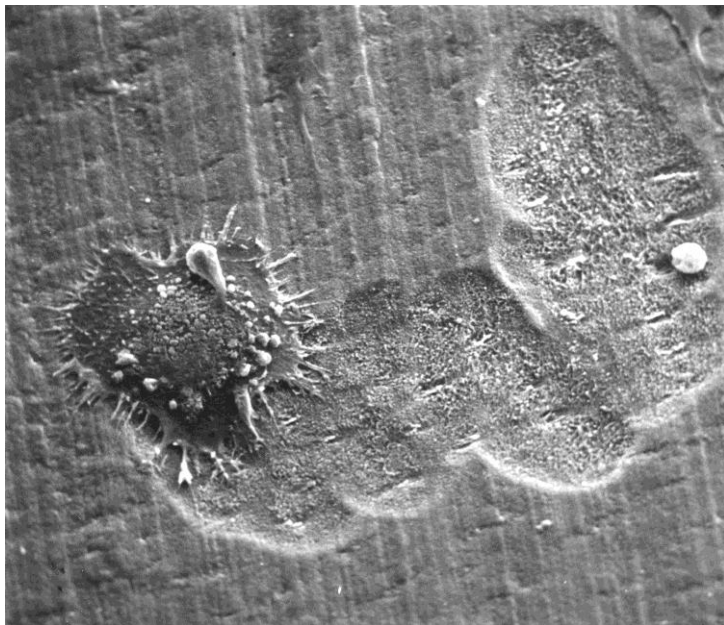
Osteoclast



Osteoblast

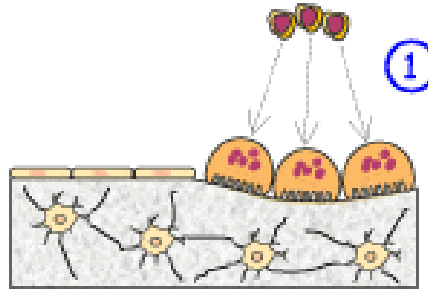


Osteocyte

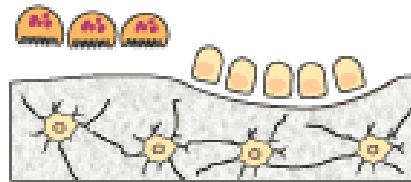


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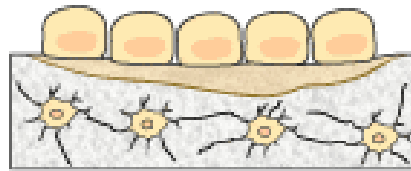
Bone Fracture Healing



- ① After a fracture, osteoclasts come and clean-up the fracture site
- ②



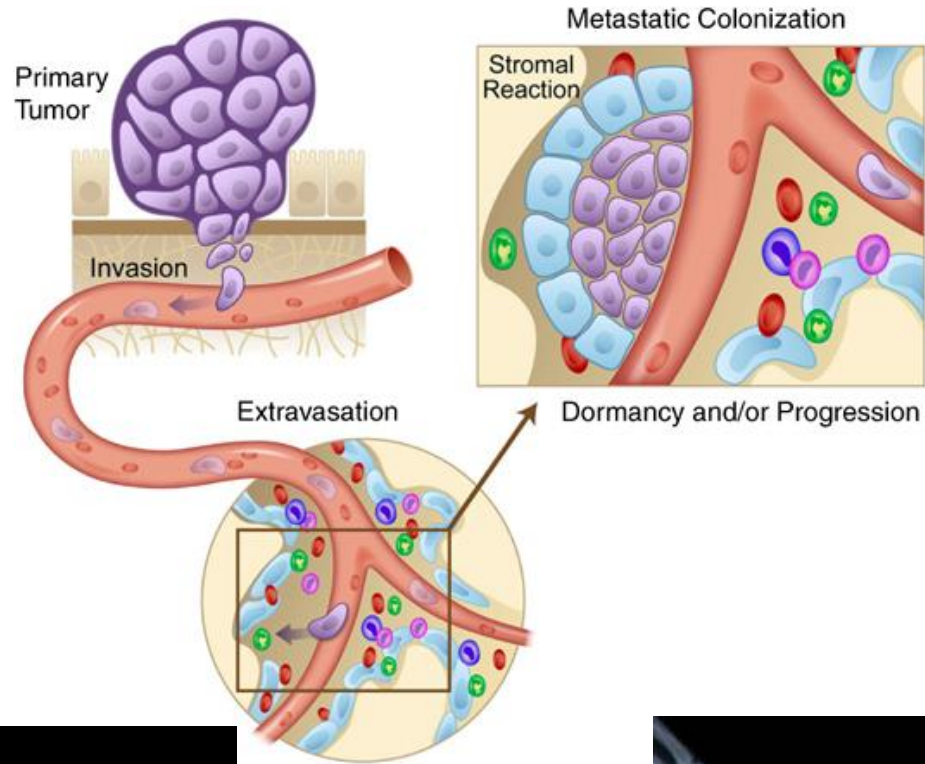
- ③ Osteoblasts then come in and deposit new bone
- ④



- ⑤ Some osteoblasts get stuck in the newly formed bone, and become osteocytes

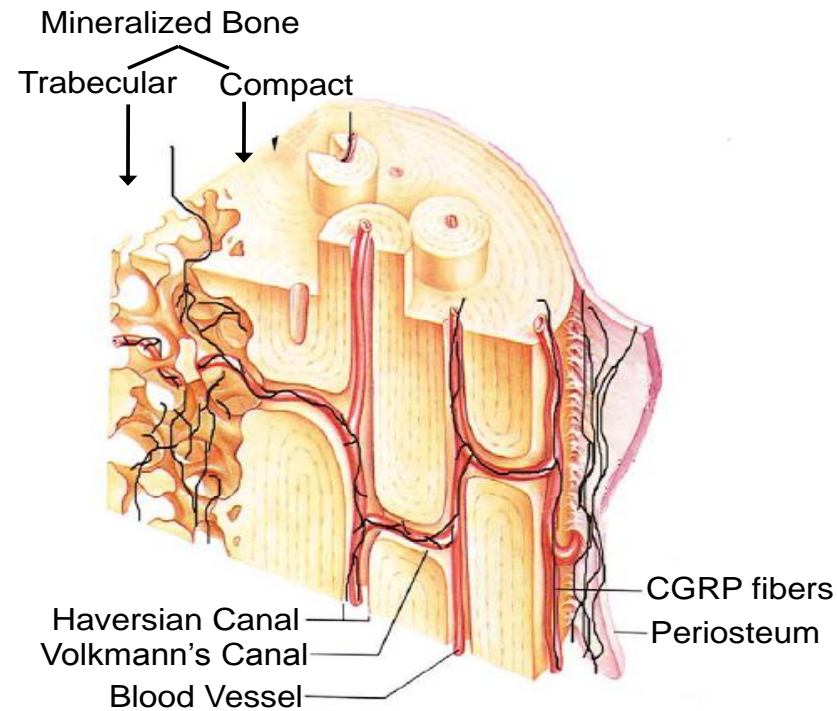
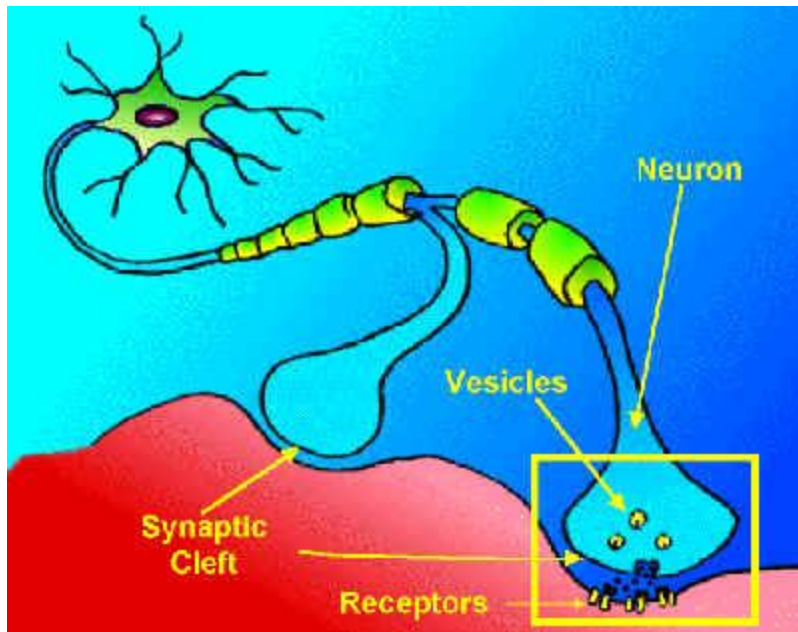


Bone Cancer



Bone Cancer Pain and Treatment

- Bone contains a lot of nerves that sense pain
- Bone pain is not effectively treated
- My Research:
 - How do we feel pain from tumors in bone?



Adapted from Marieb and Mallet Human Anatomy, 1994