



MicroXCT™ : High Resolution CT imaging of Bones, Cartilage Soft tissue & Scaffolds

Capabilities:

- Non invasive 3D imaging to $< 1 \mu\text{m}$ pixel resolution of calcified to soft tissue & microvasculature in biomedical research
- High contrast imaging for soft tissue and cartilage without contrast agent

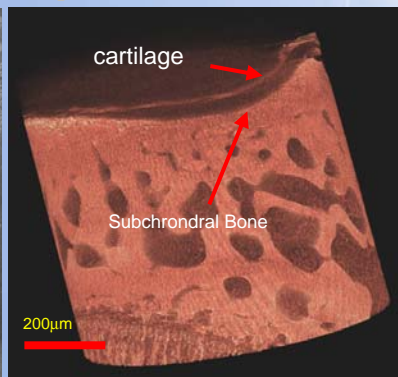
Benefits:

- Sharp and high resolution CT images at the 1 to 3 micron resolution for relatively large samples without sample sectioning for bone quality evaluation
- Rapid Virtual histology with and without contrast agents, for osteoporosis, osteoarthritis and other bone disease research

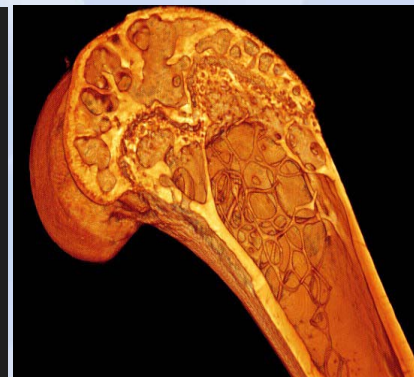
Applications Examples:



CT slice of intact rat knee joint without contrast agent



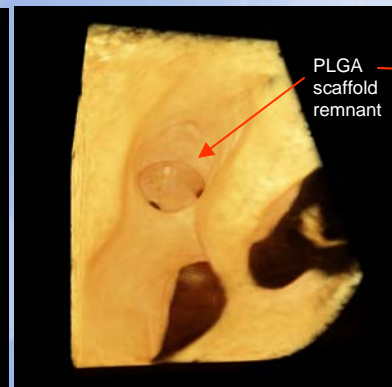
CT slice of rat tibia showing cartilage layer, without contrast agent @ $3 \mu\text{m}$



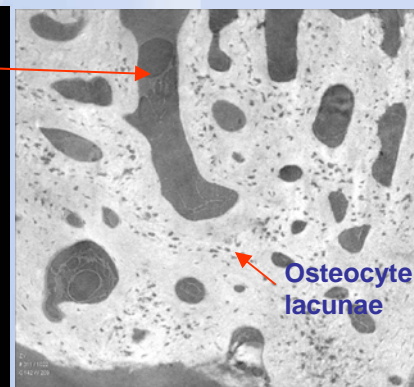
3D rendered volume of mouse tibia @ $1.5 \mu\text{m}$ resolution



3D rendered volume of trabeculae in human vertebrae at $1.5 \mu\text{m}$ resolution



Trabeculae of human cortical bone several weeks after PLGA scaffold implant



CT slice of cancellous human cortical bone @ $0.75 \mu\text{m}$ resolution