

**DEFINITIONS for items to be found in (and labeled on) the bone tissue drawing:**

blood vessel

(NOTE: there is no entry for **blood vessel** in Tortora Glossary 15<sup>th</sup> edition)

**blood vessel** (Dictionary.com) any of the vessels, as arteries, veins, or capillaries, through which the blood circulates.

**blood vessel** (howjsay - google.com.au definition) a tubular structure carrying blood through the tissues and organs; a vein, artery, or capillary.

canaliculus (plural = canaliculi)

**canaliculi** (Tortora Glossary 15<sup>th</sup> edition) Small channels or canals, as in bones, where they connect lacunae. Singular is called canaliculus.

**canaliculus** (Dictionary.com) a small canal or tubular passage, as in bone.

**canaliculus** (howjsay - google.com.au definition) a small channel or duct.

central (Haversian) canal

**central canal** (Tortora Glossary 15<sup>th</sup> edition) A circular channel running longitudinally in the center of an osteon (haversian system) of mature compact bone, containing blood and lymphatic vessels and nerves. Also called a haversian canal.

**Haversian canal** (Dictionary.com) a microscopic channel in bone, through which a blood vessel runs.

(NOTE: there is no entry for central canal or Haversian canal in howjsay)

lacuna (plural = lacunae)

**lacuna** (Tortora Glossary 15<sup>th</sup> edition) A small, hollow space, such as that found within the syncytiotrophoblast. Plural is lacunae.

**lacuna** (Dictionary.com) one of the numerous minute cavities in the substance of bone, supposed to contain nucleate cells.

**lacuna** (howjsay - google.com.au definition) a cavity or depression, especially in bone.

lamella (plural = lamellae)

**lamellae** (Tortora Glossary 15<sup>th</sup> edition) Concentric rings of hard, calcified extracellular matrix found in compact bone.

**lamella** (Dictionary.com) a thin plate, scale, membrane, or layer, as of bone, tissue, or cell walls.

**lamella** (howjsay - google.com.au definition) a thin layer, membrane, scale, or platelike tissue or part, especially in bone tissue.

nerve

**nerve** (Tortora Glossary 15<sup>th</sup> edition) A cordlike bundle of neuronal axons and/or dendrites and associated connective tissue coursing together outside the central nervous system.

**nerve** (Dictionary.com) one or more bundles of fibers forming part of a system that conveys impulses of sensation, motion, etc., between the brain or spinal cord and other parts of the body.

**nerve** (howjsay - google.com.au definition) (in the body) a whitish fiber or bundle of fibers that transmits impulses of sensation to the brain or spinal cord, and impulses from these to the muscles and organs.

## osteoclast

**osteoclast** (Tortora Glossary 15<sup>th</sup> edition) A large, multinuclear cell that resorbs (destroys) bone matrix.

**osteoclast** (Dictionary.com) one of the large multinuclear cells in growing bone concerned with the absorption of osseous tissue, as in the formation of canals.

**osteoclast** (howjsay - google.com.au definition) a large multinucleate bone cell that absorbs bone tissue during growth and healing.

## osteocyte

**osteocyte** (Tortora Glossary 15<sup>th</sup> edition) A mature bone cell that maintains the daily activities of bone tissue.

**osteocyte** (Dictionary.com) a cell of osseous tissues within the bone matrix; a bone cell.

**osteocyte** (howjsay - google.com.au definition) a bone cell, formed when an osteoblast becomes embedded in the matrix it has secreted.

## osteon (Haversian system)

**osteon** (Tortora Glossary 15<sup>th</sup> edition) The basic unit of structure in adult compact bone, consisting of a central (haversian) canal with its concentrically arranged lamellae, lacunae, osteocytes, and canaliculi. Also called a haversian system.

**osteon** (Dictionary.com) a central canal and the concentric osseous lamellae encircling it, occurring in compact bone. haversian system.

**osteon** (howjsay - google.com.au definition) The **osteon** or haversian system (named for Clopton Havers) is the fundamental functional unit of much compact bone. **Osteons** are roughly cylindrical structures that are typically several millimeters long and around 0.2 mm in diameter.