

Techniques to Study Anatomy & Anatomical Terms

- Dead tissue can be studied using the following techniques:
 - **Gross anatomy** (with the naked eye)
 - **Microscopic anatomy**
 - **Light microscope**, up to **1000x** magnification
 - **Electron microscope**, over **35,000x** magnification
 - **Transmission EM** (passes through tissue)
 - **Scanning EM** (passes over tissue)
- Live tissue can be studied by:
 - **Nuclear Magnetic Resonance Imaging** (NMR)
 - This gives the anatomy of the body
 - **Functional Magnetic Resonance Imaging** (fNMR)
 - Combining the anatomy and physiology of the body by picking up the amount of oxygen in the blood vessels and tissue
 - **Positron Emission Tomography** (PET)
 - This uses radioactive materials to localise what is being searched for#
- Any anatomical term is derived from when the person is stood up and their palms facing the anterior position, these are the terms used to describe a patient:
 - **Superior (cranial)**
 - Going from one point to another, moving towards the head
 - **Inferior (caudal)**
 - Going from one point to another, moving away from the head
 - **Medial**
 - Going from one point to another, moving towards the midline of the body
 - **Lateral**
 - Going from one point to another, moving away from the midline of the body
 - **Anterior**
 - The point of reference on the body is location on the front side of the body
 - **Posterior**
 - The point of reference on the body is location on the back/rear side of the body
 - **Superficial**
 - The point of reference is near the skin's surface
 - **Deep**
 - The point of reference is further from the skin
 - **Proximal**
 - Being proximal means being nearer to the root of the structure, for example, the forearm is proximal to the hand
 - **Distal**
 - Being distal means being further from the root of the structure, for example, the forearm is distal to the elbow
 - **Median Plane**
 - A vertical plane that divides the midline of the body into left and right

