



Anatomy

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DESCRIPTION

Anatomy (Greek anatomē, 'dissection') is that the branch of biology concerned with the study of the structure of organisms and their parts. Anatomy could even be a branch of subject which deals with the structural organization of living things. it's an old science, having its beginnings in prehistoric times. Anatomy is inherently tied to developmental biology, embryology, morphology, evolutionary biology, and phylogeny, as these are the processes by which anatomy is generated, both over immediate and long-term timescales. Anatomy and physiology, which study the structure and performance of organisms and their parts respectively, make a natural pair of related disciplines, and are often studied together. Human anatomy is one altogether the essential basic sciences that are applied in medicine. The discipline of anatomy is split into macroscopic and microscopic. anatomy, or anatomy, is that the examination of an animal's body parts using unaided eyesight. anatomy also includes the branch of superficial anatomy. anatomy involves the utilization of optical instruments within the study of the tissues of varied structures, called histology, and also within the study of cells. The history of anatomy is characterized by a progressive understanding of the functions of the organs and structures of the chassis. Methods have also improved dramatically, advancing from the examination of animals by dissection of carcasses and cadavers (corpses) to 20th century medical imaging techniques including X-ray, ultrasound, and resonance imaging. The kingdom Animalia contains multicellular organisms that are heterotrophic and motile (although some have secondarily adopted a sessile lifestyle). Most animals have bodies differentiated into separate tissues and these animals are called eumetazoans. they have an indoor digestive chamber, with one or two openings; the gametes are produced in multicellular sex organs, and thus the zygotes include a blastula stage in their embryonic development. Metazoans don't include the sponges, which have undifferentiated cells. Unlike plant cells, animal cells have neither a membrane nor chloroplasts. Vacuoles, when present, are more in number and much smaller than those within the plant

cell. The body tissues are composed of diverse kinds of cell, including those found in muscles, nerves and skin. Each typically includes a plasma membrane formed of phospholipids, cytoplasm and a nucleus. All of the varied cells of an animal are derived from the embryonic germ layers. Those simpler invertebrates which are formed from two germ layers of ectoderm and endoderm are called diploblastic and so the more developed animals whose structures and organs are formed from three germ layers are called triploblastic. All of a triploblastic animal's tissues and organs are derived from the three germ layers of the embryo, the ectoderm, mesoderm and endoderm.