

Embryological Evidence

The study of one type of evidence of evolution is called embryology, the study of embryos. Many traits of one type of animal appear in the embryo of another type of animal. For example fish embryos and human embryos both have gill slits. In fish they ~~deve~~ develop into gills, but in human they disappear before birth.

The branch of biology dealing with the formation of and development of embryos. Embryology² is defined as the branch of biology and

medicine that studies embryos and how they develop.

The word embryology can be broken down into its parts to create a clear definition of the term. An embryo is the early form of a living thing after fertilization has occurred during the development process but before birth. The suffix "ology" means the study of something.

Therefore, ~~embryo~~ embryology means the study of early form of life before birth.

Embryology is a vital branch of biological studies because an understanding of the growth and development of a species before birth can shed light on how it evolved and how various species

species are related. Embryology is considered to provide evidence for evolution and is a way to link various species on the phylogenetic tree of life.

Ex. Human embryology

There are three major embryologic categories of cell, called germ cell layers, in human bodies. The layers are

① Ectoderm: From the epithelium, the thin tissues that creates the outer layer of a body surface and lines the alimentary canals and other hollow structure, which not only covers the body but also gives rise to cells, in the nervous system.

~~Endo~~^{Meso} derm: Form the connective and "soft" tissues such as bone, muscle and fat.

Endo derm - form the Gastro intestinal tract and associated structure involved in digestion.

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During early development you would not be able to tell the difference betⁿ a cat, a human or a bat embryo.

Scientists have ~~finger~~ figured out that species who evolved from a recent common ancestor have very similar pattern of embryonic growth and development. The same group of cells develop in the same order for these species despite the fact that adult form of the species look very different.

An embryo of an organism in the fertilized egg as it goes through the

The process of development that is specific
that species. When looking at how the animal
develop from an embryo to an adult, you
can compare the processes with those of
other organisms to help determine evo-
lutionary similarities.