<u>Quote</u>: "... research is revealing how changes in the genes that control **embryological development are connected to the evolution of body structures."** [emphasis added] This research field, often referred to as "evo-devo"is one of the hottest areas in biology today.

Question:

Wouldn't Evo-Devo require the genetic systems and controls to already be in place?

Do alterations of such systems readily cause morphological deformities, such as eyeless fruit flies ?

Evolutionary Development (Evo-Devo) is Fatally Flawed

All cells of the body contain the same set of chromosomes. But different body cells use different genes on these chromosomes. The difference between a brain cell and a muscle cell is due to the genetic switch that determines when specific groups of genes are "turned on" during embryo development. This is also how embryonic cells know where to put the ears, eyes, and fingers. Such switching of genes "on" and "off" is key to proper development of the embryo, and birth defects (such as missing fingers or toes) often result from errors in the timing and specificity of these genetic switches.

Research with fruit flies has demonstrated that changes in these genetic switches can cause such deformities as additional wings or eyes (which are functionless), placement of legs on the head, or the complete absence of wings or eyes. Since these alterations result in large-scale developmental changes, many evolutionists point to these genetic switches as key mechanisms for evolutionary development, (*i.e.*, Evo-Devo). A feature article in *U.S. News and World Report* (March 18. 2005) presented the idea that at last Evo-Devo provides a genetic mechanism for evolution (although common descent is not mentioned).

Also not mentioned in this article is that Evo-Devo requires the genetic template of genes and control systems to already be in place. It offers no explanation for the origin for these elaborate and complex genetic systems - an essential requirement for evolutionary theory. Instead it demonstrates that alterations of such systems will readily cause morphological deformities, such as eyeless fruit flies - truly an evolutionary wonder. The more benign of these developmental changes, such as pigmentation intensity or location, fit well with a creation model, and offer an example of how extensive varieties can be introduced into the created kinds. But, the level of changes does not provide a sufficient means of accomplishing common descent. In fact, Evo-Devo is unable to give legs to a fish, wings or feathers to a reptile, or an opposite thumb to a dog. <u>Evo-Devo is limited to the genetic potential already present in the specific organism</u>, and merely demonstrates that altering the precise synchronization of these genetic switches can lead to a wide variety of deformities.

see May, et al, 2004, Creation Research Society Quarterly 41:185