## Evolutionary Change And Heterochrony

Recent analyses of the fossil record have revealed that heterochrony has played a significant role in the evolution of most marine invertebrate groups. Recognit <a href="http://www.sciencedirect.com/science/article/pii/0169534788900365">http://www.sciencedirect.com/science/article/pii/0169534788900365</a>

The canals of the mechanosensory lateral line system are components of the dermatocranium, In Evolutionary Change and Heterochrony. Edited by McNamara KJ. <a href="http://www.evodevojournal.com/content/5/1/21">http://www.evodevojournal.com/content/5/1/21</a>

Evolutionary Change and Heterochrony [Kenneth J. McNamara] on Amazon.com. \*FREE\* shipping on qualifying offers. Biologists, palaeontologists and anthropologists <a href="http://www.amazon.com/Evolutionary-Change-Heterochrony-Kenneth-McNamara/dp/0471958379">http://www.amazon.com/Evolutionary-Change-Heterochrony-Kenneth-McNamara/dp/0471958379</a>

The connection between development and evolution has become the focus of an increasing amount of research in recent years, and heterochrony has long been a key <a href="http://journals.cambridge.org/action/displayAbstract?aid=681">http://journals.cambridge.org/action/displayAbstract?aid=681</a>

Understanding the link between ontogeny (development) and phylogeny (evolution) remains a key aim of biology. Heterochrony, the altered timing of developmental events

http://rspb.royalsocietypublishing.org/content/280/1769/20131479

This has resulted in a situation whereby almost all morphological evolution is attributed to heterochrony, and the remainder is modes of ontogenetic change, <a href="http://paleobiol.geoscienceworld.org/content/31/3/354.short">http://paleobiol.geoscienceworld.org/content/31/3/354.short</a>

In biology, heterochrony is defined as a developmental change in the timing or rate of events, leading to changes in size and shape. There are two main components <a href="http://en.wikipedia.org/wiki/Heterochrony">http://en.wikipedia.org/wiki/Heterochrony</a>

Evolutionary Change and Heterochrony. John Wiley and Sons, Chichester, pp. 286, Journal of Evolutionary Biology, 9: 1034 1036. doi: 10.1046/j.1420-9101.1996 <a href="http://onlinelibrary.wiley.com/doi/10.1046/j.1420-9101.1996.9061034.x/abstract">http://onlinelibrary.wiley.com/doi/10.1046/j.1420-9101.1996.9061034.x/abstract</a>

What is an evolutionary change in the rate or timing of heterochrony The punctuated equilibrium model of evolution holds that evolution <a href="http://www.answers.com/Q/What is an evolutionary change in the rate or timing of developmental events">http://www.answers.com/Q/What is an evolutionary change in the rate or timing of developmental events</a>

Abstract: Development is the usual arena of evolutionary change in morphology, and much of evolution obviously depends on it. It is very common, however, for <a href="http://www.santafe.edu/research/working-papers/abstract/e9a66fc372de8dc076f0264bbd99bdfe/">http://www.santafe.edu/research/working-papers/abstract/e9a66fc372de8dc076f0264bbd99bdfe/</a>

Intraspecific heterochrony and life history evolution: Decoupling somatic and sexual development in a facultatively paedomorphic salamander <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC20432/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC20432/</a>

Dec 31, 1999 I. Abstract The evolution of plant morphology is the result of changes in developmental processes. Heterochrony, the evolutionary change in developmental <a href="http://www.thefreelibrary.com/Heterochrony+in+Plant+Evolutionary+Studies+through+the+Twentieth...-a063300306">http://www.thefreelibrary.com/Heterochrony+in+Plant+Evolutionary+Studies+through+the+Twentieth...-a063300306</a>

A heterochronic change is, in general, a change in the rate or timing of development of some cell lines in the body relative to others. A mutation that alters the <a href="http://www.blackwellpublishing.com/ridley/a-z/Heterochrony.asp">http://www.blackwellpublishing.com/ridley/a-z/Heterochrony.asp</a>

Evolutionary change and heterochrony. Added by Laurie Godfrey. potential certification reach. To share this paper with the field, you must first certify it. <a href="http://www.academia.edu/3980196/Evolutionary change">http://www.academia.edu/3980196/Evolutionary change and heterochrony</a>

Background Heterochrony, evolutionary change in developmental rate or relative timing of developmental events, plays a key role in the transformation of morphology in

http://digitalcommons.uri.edu/cgi/viewcontent.cgi?article=1052&context=bio\_facpubs

SPATIOTEMPORAL REORGANIZATION OF GROWTH RATES IN THE Heterochrony refers to evolutionary change in develop-mental rate or timing that results in parallelism <a href="http://deepblue.lib.umich.edu/bitstream/handle/2027.42/72102/j.0014-3820.2000.tb0056">http://deepblue.lib.umich.edu/bitstream/handle/2027.42/72102/j.0014-3820.2000.tb0056</a> 8.x.pdf?sequence=1

Home > Geological Magazine > Volume 133 > Issue 04 > K. J. McNamara (ed.) 1995. Evolutionary Change and Heterochrony. xii + 286 pp. Chichester, New York, Brisbane <a href="http://www.journals.cambridge.org/abstract\_S0016756800007664">http://www.journals.cambridge.org/abstract\_S0016756800007664</a>

HETEROCHRONY AND HETEROTOPY 243 the only evolutionary novelties we can encom- pass by this model are changes in rates or tim- ing of growth along a shared allometric tra-

http://www.jstor.org/pss/2401119

Additional Physical Format: Online version: Evolutionary change and heterochrony. Chichester, England; New York: Wiley, 1995 (OCoLC)624466337 <a href="http://www.worldcat.org/title/evolutionary-change-and-heterochrony/oclc/32133316">http://www.worldcat.org/title/evolutionary-change-and-heterochrony/oclc/32133316</a>

Heterochrony in dinosaur evolution. Added by John Long. potential certification reach. Journal Name: Evolutionary change and heterochrony Publication Date: 1995. http://www.academia.edu/4012817/Heterochrony in dinosaur evolution

Evolutionary modifications of ontogeny: heterochrony and beyond Mark Webster and Miriam Leah Zelditch Evolutionary change and heterochrony. Wiley, <a href="http://www.istor.org/pss/4096940">http://www.istor.org/pss/4096940</a>

Traditionally, evolutionary biology has delineated two types of processes in organismal evolution . The first is microevolution, the process of within-species change  $\frac{1}{2}$ 

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC26642/

Beyond Heterochrony: The Evolution of Development. Miriam L. Zelditch, ed.Wiley-Liss, New York, 2001. 371 pp., illus. \$99.95 (ISBN 0471379735 cloth). http://bioscience.oxfordjournals.org/content/52/10/944.full

Evo-devo: Explaining major evolutionary change. Changes in the genes controlling development can have major effects on the morphology of the adult organism. http://evolution.berkeley.edu/evolibrary/article/evodevo\_04