PaleoPódium 53.

SYNTHESYS
Synthesis of systematic resources

MEGHÍVÓ

Az MTA–MTM–ELTE Paleontológiai Kutatócsoportja és az MTM Őslénytani és Földtani Tára félig formális, félig kötetlen, házi (de nyilvános) előadás-sorozatának ötvenharmadik előadására

Michelangelo BISCONTI:

Evolution of baleen-bearing whales (Mammalia, Cetacea, Mysticeti): old questions, new discoveries

Ideje: 2013. július 4. (csütörtök), 15:00

Helye: az Őslénytár könyvtára (Ludovika tér 2.)

Baleen-bearing whales (mysticetes) include the most gigantic vertebrates ever lived (the blue whale) and have a complex evolutionary history. The fossil record of this group is rather rich and allowed to reconstruct the evolution of their past biodiversity. Recently, the analysis of gene sequences helped in the reconstruction of some of the mechanisms of their morphological change over time. However, fossils and molecules have failed, until now, in getting a shared and unambiguous view of mysticete evolutionary history. Major points of discussion are about the origin of Balaenopteridae (rorqual and humpback whales), the relationships of Eschrichtiidae (gray whales) and Neobalaenidae (pygmy right whales). Balaenopterids include the large rorquals that are able to catch enormous amounts of preys through gulp feeding by means of a sophisticated craniomandibular musculoskeletal apparatus. The step-by-step morphological evolution of this apparatus is just becoming to be understood thanks to many new early-diverging fossil balaenopterids. The relationships of the gray whales are still debated because morphology and molecules provide very different results. In one view, the gray whale is a relict species that is closely related to the extinct Cetotheriidae family while in other views it is a modified balaenopterid or the sister group of Balaenopteridae. The relationships of the only living neobalaenid species, *Caperea marginata*, are hotly debated as it is seen as a sister group of Balaenidae (right and bowhead whales), of Balaenopteridae or as a relict Cetotheriidae taxon. Thanks to several new discoveries, our knowledge is increased of the morphological diversity and of the timing of most of the morphological transformations occurred during the history of this group. However, a synthesis is still lacking. In this conference, a tentative synthesis will be provided that takes into consideration new studies on fossils including *Mesocetus hungaricus* whose significance in the phylogeny of the mysticetes has not been assessed up to now.

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Vendégünk a SYNTHESYS projekt keretében érkezett, házigazdája Gasparik Mihály.

Az előadásra minden érdeklődőt szeretettel várunk!