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Expression of Cranial Neural Crest Genes in *Moenkhausia sanctaefilomenae*

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Poster Presentation P31

**EXPRESSION OF CRANIAL NEURAL CREST GENES IN
*MOENKHAUSIA SANCTAEFILOMENAE***

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Neural crest cells are multipotent embryonic cells that migrate from their origins and populate various sites in the embryo. In the head, the cranial neural crest cells (CNC), migrate ventrally to differentiate into cartilage and bones that form the craniofacial skeleton. Several genes are thought to be involved in this process by controlling cell specification, cell survival, and cell migration/differentiation (Kuriyama & Mayor 2007). Our research examines the expression of CNC genes such as *Foxd3*, *Collagen IIa1*, *Snail 1*, *Snail 3*, and *Faciogenital Dysplasia (FGD)* in *Moenkhausia sanctaefilomenae*. Via the process of whole mount *in situ* hybridization, the gene expressions were analyzed. At various developmental stages, specific genes have distinct patterns of expression that change over time. Also, during the same developmental time frame, different genes have different expression domains. These results suggest the differing roles for genes during the development of cranial neural crest cells.