

AZ (Carnian), which consists in a rib and a right maxilla with nearly 20 cm in preserved rostral caudal length (UFSM11617), without preserved teeth. In lateral view, maxillary body is 4.6 cm height, prior the ascending process, and 1.7 cm in the preserved posterior region, in a subtriangular shape. The material introduced here is still under preparation, but the presence of palatal process of the maxilla and the ascending process can be seen, the latter is broken near the preorbital *sinus*, visible in medial view. Eleven alveoli are evident, being the largest one 2.3 cm of anteroposterior length and 1.5 cm of labio-lingual dimension. Some non-fused, triangular interdental plates are observable. It is not possible to refer the material to known taxa, although it resembles other 'rauisuchians'. The ongoing preparation may clarify the shape of the antorbital cavity and the presence of maxillary crest and associated foramina.

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## ***GLYPTODON MUNIZI AMEGHINO Y PANOCHTHUS INTERMEDIUS LYDEKKER (XENARTHRA, GLYPTODONTIDAE): DOS NUEVOS REGISTROS PARA LA BASE DE LA FORMACIÓN LA ESPERANZA EN LAS SIERRAS DE OLAVARRÍA, PROVINCIA DE BUENOS AIRES, ARGENTINA***

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En los últimos diez años, en las Serranías de Olavarría (provincia de Buenos Aires) se han realizado considerables avances en el conocimiento sedimentológico, estratigráfico y paleontológico; donde, además, se han podido determinar nuevas unidades litoestratigráficas y su correspondencia biocronológica, incluyendo la exhumación de un gran número de fósiles. En este trabajo se dan a conocer dos nuevos registros de Xenarthra Glyptodontidae, *Glyptodon munizi* Ameghino, 1881 y *Panochthus intermedius* Lydekker, 1895. Los taxones aquí estudiados provienen de la base de la Formación La Esperanza, caracterizada sedimentológicamente por la presencia de cuatro subniveles. Ellos incluyen sedimentos arenoso-limosos, con algunos clastos psefíticos y muñecos de tosca. Hacia la base se observan lentes conglomerádicos mientras que en los niveles superiores existen cárcavas y una gran cantidad de paleocuevas de mediano y pequeño tamaño. *Panochthus intermedius* está representado por una gran porción de la región póstero-dorsal de la coraza dorsal (CCA\*-41) que muestra una figura central rodeada de hasta siete hileras de figuritas periféricas, en tanto que hacia el dorso es posible observar un patrón claramente reticular. A su vez, *G. munizi* incluye varios restos asociados de la coraza dorsal (CCA-50); los osteodermos muestran en su superficie expuesta una figura central de gran tamaño con una con una depresión en su parte central. Desde una perspectiva bioestratigráfica, la presencia de estos taxones en la Formación Esperanza sugiere, por primera vez, la presencia de niveles asignables al Piso/Edad Ensenadense (Pleistoceno Temprano-Medio) para la base de esta unidad.

\*CCA: Colección Cementos Avellaneda (Registrada en el Centro de Registro del Patrimonio Paleontológico y Arqueológico perteneciente a la Dirección Provincial de Museos y Preservación Patrimonial del Gobierno de la Provincia de Buenos Aires).

## **ANATOMY AND SYSTEMATIC OF PROSQUALODON AUSTRALIS (CETACEA, ODONTOCETI) FROM THE EARLY MIocene OF PATAGONIA**

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The extinct odontocete *Prosqualodon australis* Lydekker, 1894 (Early Miocene, Gaiman Formation, Chubut Province, Argentina) is for the first time described in-depth based on the holotype (MLP 5-8, a partial skull) and a referred specimen (MLP 5-9, an almost complete skull; Cabrera, 1926). Besides, the first phylogenetic analysis including this species as an operational taxonomic unit itself is presented, considering a comprehensive morphological matrix of odontocetes. The peculiar morphology of the anterior projection of the antorbital process along with plesiomorphic dental features (such as well-marked heterodont, large lateromedially compressed teeth with long crowns, reticulated enamel, and biradiculated teeth in the maxillae) are proposed to diagnose the species. Also, the body length of *P. australis* is inferred to vary at least between 2 and 3 m between the juvenile and the adult stages. Comparative anatomical studies show ontogenetic and intraspecific differences between the specimens analyzed. The phylogenetic analyses show *P. australis* as a stem-Odontoceti and *Prosqualodon* as a paraphyletic genus. The relative basal position of *P. australis* in the optimal trees recovered may respond to plesiomorphic skull characteristics. Also due to the lack of preserved earbones in *P. australis*, the future description of tympano-periotic bones might lead to new phylogenetic results.

## MORPHOLOGICAL VARIATION IN THE ILIUM OF SATURNALIIN SAUROPODOMORPHS (DINOSAURIA, SAURISCHIA) –NEW SPECIMENS FROM THE LATE TRIASSIC (CARNIAN) OF SOUTHERN BRAZIL

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Saturnaliinae is a group of Carnian sauropodomorphs, mainly represented by *Chromogisaurus* Ezcurra, 2010 and *Saturnalia* Langer, 1999. Pelvic girdle elements are frequently preserved in its representatives, which are characterized by conspicuous rugosities in the iliac dorsal portion, representing muscle scars (iliac blade rugosity, IBR; post-acetabular rugosity, POR, preacetabular rugosity, PRR). Though referred as some of the key-characters of Saturnaliinae in the literature, these rugosities also occur in other dinosauriforms (herrerasaurids, silesaurids), whereas in sauropodomorphs they may be restricted to Carnian forms. We report variation in these features among specimens of *Saturnalia* (MCP 3844-PV; MCP 3845-PV; MCP 3846-PV), and new saturnaliin specimens (UFSM 11612; CAPPA/UFSM 0200) that may shed light on this issue. All specimens are similar in body size and preserve partial ilia. CAPPA/UFSM 0200 and MCP 3845-PV are the only specimens that preserve all three rugosities, those being robust and well-defined. The area that would bear the PRR is broken away in *Chromogisaurus* and MCP 3844-PV, but they have both POR and IBR. UFSM 11612 lacks the preacetabular ala and the iliac blade, presenting faint striations on the homologous area of POR. MCP 3846-PV does not present rugosities, contrasting with the aforementioned specimens. As the latter specimen is referred to *Saturnalia* (as well as 3844-PV and MCP 3845-PV, which present robust scars), the diagnostic importance of morphological variation in the expression of iliac muscle scars should be taken with caution, given the alleged importance of these traits as some of the key-characters to define Saturnaliinae.

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