to admit what they don’t know. This makes guidance of research easier than with some graduate students ("like having graduate students without the whining"). The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session I

IS GUANLONG A TYPANNOUSAUROID OR A SUBADULT MONOLOPHOSAURUS?

CARR, Thomas, Carthage College, Kenosha, WI

Guanlong wucaii is a purported Late Jurassic basal tyrannosauroid from the Shishugou Formation of northwestern China. Guanlong bears a tall and fenestrated nasal crest that extends along the top of the snout, as in Monolophosaurus jiangi, a carnosaur that is about twice the size as Guanlong, from a lower level in the same unit. The original cladistic analysis of Guanlong used a data matrix relevant to resolving the relationships among basal theropods, which reconstructed it as a basal tyrannosauroid. However, the similarities shared between Guanlong and Monolophosaurus in the crest prompted a test of the original hypothesis using a data matrix based on characters relevant for resolving ingroup relationships of Tyrannosauroidea.

The data matrix includes 201 characters and 34 theropod species. The matrix was analyzed in PAUP 4.0b under a heuristic search; Guanlong was reconstructed as a carnosaur, and as the sister species of Monolophosaurus. This relationship is supported by the shape of the rostral ramus of the maxilla; a sagittal, elongate, pneumatic and fenestrated crest along the top of the snout; and a foramen in the pubic process of the ischium. Monolophosaurus is distinguished from Guanlong by a longer crest that includes the premaxilla and lacrimal, a rostrally-positioned maxillary fenestra, a deep maxilla, a long jugal process of the quadrate, a subocular process on the postorbital, and a rostrally-positioned maxillary fenestra, a deep maxilla, a long jugal process of the quadrate-tojugal, and a subocular process on the postorbital. Guanlong is distinguished from Monolophosaurus by a wide snout tip, short squamosal process of the postorbital, a concave crest prompted a test of the original hypothesis using a data matrix relevant to resolving ingroup relationships of Tyrannosauroidea.

A CURSORIAL BIRD FROM THE MAASRICHTIAN OF ANTARCTICA

CARR, Thomas, Carthage College, Kenosha, WI

Museum of Natural History, Norman, OK

A left femur from the early Maastrichtian, Cape Lamb Member of the Lopez de Bertodano Fm. on Vega Island, Antarctic Peninsula, shows striking similarities to modern cursorial predatory birds of South America (Serricas, Cariamidae) and of Africa (Secretarybirds, Sagittariidae). The size of the Antarctic femur is nearly identical to those of both modern bird families and thus the Antarctic specimen would be about the same size, at around a meter in height. The crucial features in demonstrating the habit of this Maastrichtian bird are: the enlarged and posteriorly prominent tibiofibular cristae; the laterally expansive lateral crus; and the highly planar and vertically oriented fibular trochlea. These apomorphic features are present in the modern yet unrelated cursorial birds and are equally developed in the Antarctic specimen. Considering the proximal femoral features, the biogeographical location and the presence of phororhacoids in the Eocene of Antarctica, this specimen may represent a taxon which may be ancestral to both cariamids and phororhacoids or it is the basal cariamid which is then ancestral to the phororhacoids, rather than being their descendant.

Poster Session III

ON THE LEFT-RIGHT ASYMMETRY IN DINOSAURS

CASTANHINHA, Rui, Loures, Portugal; MATEUS, Octávio, Faculdade da Lourinhã & Universidade Nova de Lisboa, Lourinhã, Portugal

The study of different kinds of morphological left-right (L-R) asymmetries in all taxa is a very powerful tool to understand evolution since it is a way to measure the developmental stability of an organism against environmental perturbations. Excluding every pathological or subtle asymmetry and all cases of taphonomic distortion, this work focuses only on two kinds of unambiguous asymmetries: fluctuating and adaptive asymmetry. There are several cases of conspicuous left-right asymmetry in dinosaurs and is probably more common than previously thought. The pneumatic cavities systems in skull and vertebrae of theropods are: the enlarged and posteriorly prominent tibiofibular cristae; the laterally expansive lateral crus; and the highly planar and vertically oriented fibular trochlea. These apomorphic features are present in the modern yet unrelated cursorial birds and are equally developed in the Antarctic specimen. Considering the proximal femoral features, the biogeographical location and the presence of phororhacoids in the Eocene of Antarctica, this specimen may represent a taxon which may be ancestral to both cariamids and phororhacoids or it is the basal cariamid which is then ancestral to the phororhacoids, rather than being their descendant.

Poster Session II

A RICH NEOTROPICAL PALEONTOLOGICAL RESOURCE IN VENEZUELA

CARRY, Michael, Museum of Natural History, Washington, DC

The rich fossiliferous Tapanahony Formation of northwestern China provides an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session I

A COMPLETELY SCALED THEROPOD FROM THE CRETACEOUS OF MEXICO

CARR, Michael, Museum of Natural History, Washington, DC

The complete theropod specimen is a basal theropod from the Late Cretaceous of Mexico. The complete cranial, postcranial, and articulated remains provide an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session I

A RICH NEOTROPICAL PALEONTOLOGICAL RESOURCE IN VENEZUELA

CARRY, Michael, Museum of Natural History, Washington, DC

The rich fossiliferous Tapanahony Formation of northwestern China provides an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session I

A RICH NEOTROPICAL PALEONTOLOGICAL RESOURCE IN VENEZUELA

CARRY, Michael, Museum of Natural History, Washington, DC

The rich fossiliferous Tapanahony Formation of northwestern China provides an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session I

A RICH NEOTROPICAL PALEONTOLOGICAL RESOURCE IN VENEZUELA

CARRY, Michael, Museum of Natural History, Washington, DC

The rich fossiliferous Tapanahony Formation of northwestern China provides an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session I

A RICH NEOTROPICAL PALEONTOLOGICAL RESOURCE IN VENEZUELA

CARRY, Michael, Museum of Natural History, Washington, DC

The rich fossiliferous Tapanahony Formation of northwestern China provides an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff. The use of volunteers has resulted in an extraordinary high level of productivity for the department than if only by staff.

Poster Session II

ON THE PRESENCE OF THE DIRE WOLF CANIS DIRUS FROM THE VALEQUILO BASIN, PUEBLA, CENTRAL MEXICO

CASTILLO, Jesus, Univ. Autón. Edo. Hidalgo, Pachuca, Hidalgo, Mexico; BRASIL, Caramal, Museo de Paleontología, Pachuca, Hidalgo, Mexico

The study of different kinds of morphological left-right (L-R) asymmetries in all taxa is a very powerful tool to understand evolution since it is a way to measure the developmental stability of an organism against environmental perturbations. Excluding every pathological or subtle asymmetry and all cases of taphonomic distortion, this work focuses only on two kinds of unambiguous asymmetries: fluctuating and adaptive asymmetry. There are several cases of conspicuous left-right asymmetry in dinosaurs and is probably more common than previously thought. The pneumatic cavities systems in skull and vertebrae of theropods are: the enlarged and posteriorly prominent tibiofibular cristae; the laterally expansive lateral crus; and the highly planar and vertically oriented fibular trochlea. These apomorphic features are present in the modern yet unrelated cursorial birds and are equally developed in the Antarctic specimen. Considering the proximal femoral features, the biogeographical location and the presence of phororhacoids in the Eocene of Antarctica, this specimen may represent a taxon which may be ancestral to both cariamids and phororhacoids or it is the basal cariamid which is then ancestral to the phororhacoids, rather than being their descendant.

Recent palaeontological work carried out on new localities from the Basin, allowed

© 2006 by the Society of Vertebrate Paleontology