

**134. POSITIONAL AND LOCOMOTOR BEHAVIOR OF  
*PARADOLICHOPITHECUS ARVERNENSIS* AS  
INFERRED FROM THE FUNCTIONAL MORPHOLOGY  
OF THE POSTCRANIA**

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*Paradolichopithecus arvernensis* is a large bodied *Papionin* known from Pliocene localities from Europe, and possibly Asia, similar in size to extant

*Papio*. The Late Pliocene localities of Valea Graunceanului, Romania and Vatera, Greece have yielded a number of postcranial elements including several partial humeri, ulnae, radii, femora, one distal tibia, astragalus, third metatarsal, and several phalanges. The postcranial material assigned to *P. arvernensis* is compared to a sizable sample of extant cercopithecids whose positional behavior has been described by various authors. Comparative techniques include observation and description of qualitative characters, metric analysis using several standard metrics, as well as geometric morphometric analysis of three-dimensional landmark data. While the exact nature of positional behaviors is impossible to estimate, the results do indicate that *P. arvernensis* probably utilized a comparatively large amount of terrestrial positional behaviors, similar to extant *Papio* and *Theropithecus*, perhaps exceeding that of any known macaque species. This interpretation is supported by the short retroflexed medial epicondyle, long medial trochlear margin, retroflexed olecranon process, talar morphology, and short robust phalangeal shape reflected in both the standard metrics and geometric morphometrics. This estimation is consistent with the habitat reconstructions for Vatera and Valea Graunceanului that suggest relatively open savanna woodlands. The postcranial similarities between these forms are likely to be convergences due to adoption of similar positional behaviors and are not likely to represent synapomorphies, as the cranial material of *P. arvernensis* appears to link it with the macaques. Funding: NSF DBI 9602234 (NYCEP) and ACI 9982351 (NYCEP Morphometrics Group).

**American Journal of Primatology 66 (Suppl.): 1-43 (2005)**

**Program for the  
Twenty-Eighth Annual  
Meeting Of  
The American Society of  
Primatologists**

Hosted by the  
Oregon National Primate Research Center  
Oregon Health & Science University  
Portland, OR, USA

August 17<sup>th</sup> to 20<sup>th</sup>, 2005

**Conference schedule / 27**

04:15 PM BROAD SCALE DETERMINANTS OF ANTHROPOID  
COMMUNITY STRUCTURE IN ASIA J. M. Kamilar, [132]

04:30 PM FOREST FRAGMENTATION AND CHANGES IN THE  
FEEDING ECOLOGY OF BLACK HOWLER MONKEYS  
(*ALOUATTA PIGRA*) IN CALAKMUL, MEXICO S. Calme,  
A. Rivera, [133]

04:45 PM THE NEWLY-DISCOVERED HIGHLAND MANGABEY  
(*LOPHOCEBUS KIPUNJI*) OF TANZANIA: TAXONOMY,  
BIOGEOGRAPHY, AND CONSERVATION C. Ehardt,  
T. Davenport, T. Butynski, [222]

02:45 PM-04:00 PM Session 11: Behavior and Morphology (Parliament Room)  
Symposium, Frances White Moderator

02:45 PM POSITIONAL AND LOCOMOTOR BEHAVIOR OF  
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E. Delson, [134]