



Phylogenetic relationships of *Unenlagiidae* theropods: are they members of *Dromaeosauridae*?

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Paraves is the theropod clade that includes Aves and their close relatives, the deinonychosaurs. The fossil record of basal paravians (currently ranging from Late Jurassic to Late Cretaceous) was mostly restricted to the Northern Hemisphere, but recent discoveries demonstrate their presence and high diversity also on the southern landmasses (e.g., South America, Madagascar). *Unenlagiidae* is a clade of Gondwanan paravians currently constituted by *Unenlagia*, *Neuquenraptor*, *Buitreraptor*, *Austroraptor*, and probably also *Rahonavis*. Although *unenlagiids* have been frequently considered as dromaeosaurid deinonychosaurs, most of the features supporting this interpretation are conflictive, at least. Modification of integrative databases produces significant changes in the topological distribution of taxa within Deinonychosauria, depicting *unenlagiids* outside this clade. Our analysis retrieves, in contrast, a monophyletic Avialae formed by *Unenlagiidae* plus Aves. Moreover, the purported Late Cretaceous Malagasy *unenlagiid* *Rahonavis* is here excluded from *Unenlagiidae*, but is nested within Aves. The phylogenetic position of *Unenlagiidae* as sister group of Aves invites to further investigate the peculiar anatomy of this theropod group, which rise questions about phylogenetic and functional significances on the origin and early evolution of flying birds.

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