

Lynnea Jackson

Lecture Title: A New Basal Sauropodomorph from the Early Jurassic of Antarctica

Abstract:

Here, I describe the cranial anatomy of a new species of basal sauropodomorph from the Early Jurassic of Antarctica. This new specimen, FMNH PR 3051, is a juvenile and was collected from the lower Hanson Formation on Mt. Kirkpatrick and includes the only cranial remains of a sauropodomorph from that continent. Only one other basal sauropodomorph, *Glacialisaurus hammeri*, is currently described from Antarctica, but differs from FMNH PR 3051 in femoral anatomy. The skull is mostly complete apart from missing the posterodorsal margin but is mediolaterally compressed and sheared obliquely. We used μ CT scans to create a digital model of each preserved skull bone. Phylogenetic analysis suggests that FMNH PR 3051 is sister to the two *Eucnemesaurus* species. The phylogeny was used in a biogeographic analysis to determine the historical pathway of sauropodomorphs. FMNH PR 3051 and *Glacialisaurus* both have parallel biogeographic pathways with ancestral ranges originating in South Africa.