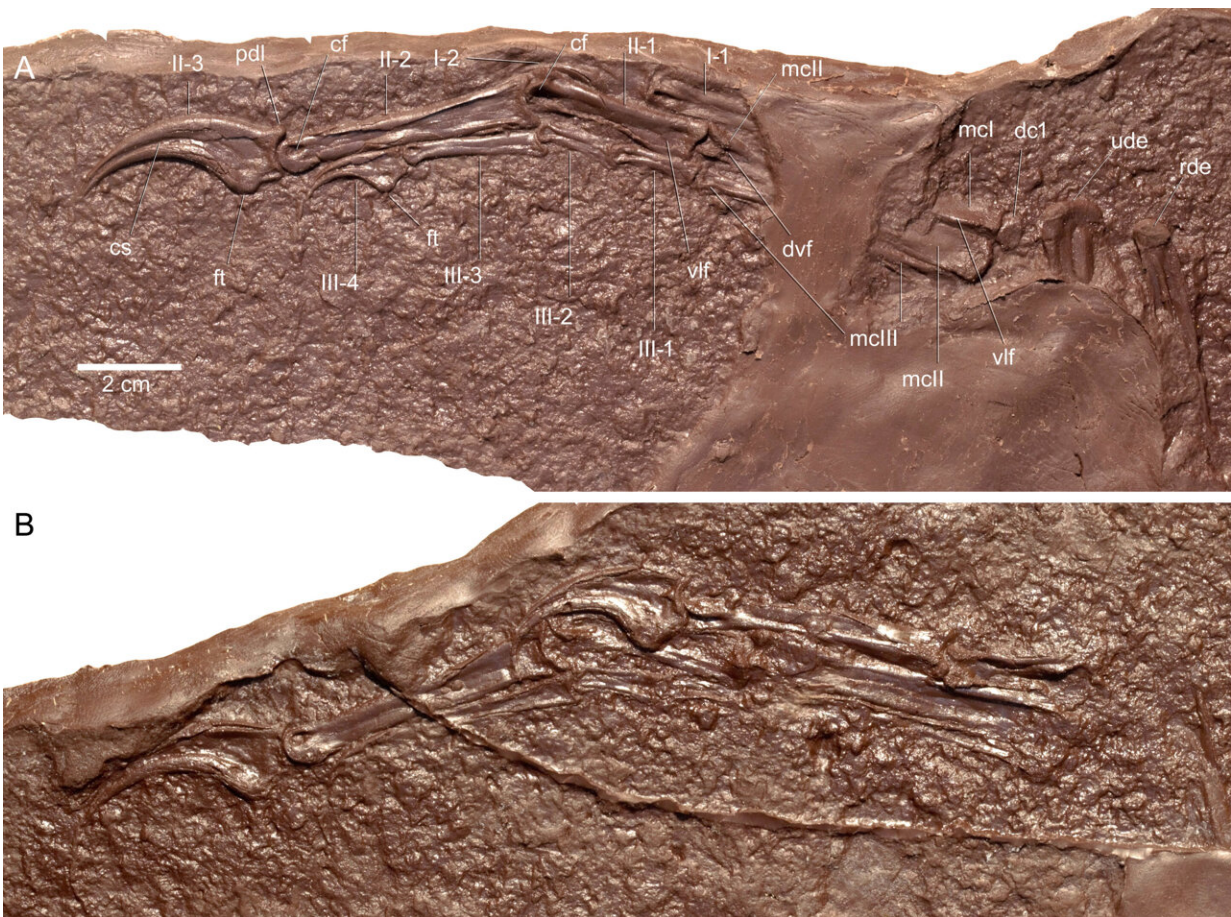


Newly identified theropod dinosaur had strange hands

June 22 2023, by Bob Yirka



Cast of holotype hand of *Migmanychion laiyang* gen. et sp. nov. (LY 2022JZ3001). A, counterslab (reversed for comparison); B, slab. Abbreviations: I/II/III, phalanx I/II/III; cf, collateral fossa; cs, collateral sulcus; dc, distal carpal; dvf, distal ventral fossa; ft, flexor tubercle; mc, metacarpal; pdl, posterodorsal lip; rde, radius distal end; ude, ulna distal end; vlf, ventrolateral flange. Credit: *Cretaceous Research* (2023). DOI: 10.1016/j.cretres.2023.105605

A team of archaeologists and paleontologists affiliated with several institutions in China, working with a colleague from Italy, has identified a new species of theropod dinosaur with strange hand features. In their paper published in the journal *Cretaceous Research*, the group describes the creature and where it fits evolutionarily with other dinosaurs.

The fossil was found at the Pigeon Hill dig site near the town of Baoshan in Inner Mongolia, China. It was completely embedded in a slab of rock, allowing the researchers a view from the side only. Still, that was enough to reveal that the [dinosaur fossil](#) represented a new species of theropod. Dating of the fossil put the dinosaur in the Early Cretaceous epoch, approximately 121 million years ago.

The newly discovered dinosaur has been named *Migmanychion laiyang*—examination of its bone structure showed it to be a member of Maniraptora, from the group of coelurosaurian dinosaurs, some of which evolved to become modern birds. The group is believed to have first appeared during the Jurassic and is part of a broader clade that includes both *Tyrannosaurus rex* and *allosaurus*. Most have long arms and hands with three fingers, along with a uniquely moon-shaped bone in the wrist. Maniraptorans are the only group of dinosaurs that include those that fly.

The [fossil](#) is incomplete, preserving only one complete hand, some ribs and a left forelimb. But it reveals a never-before-seen species of theropod with a unique hand structure different from all other known theropods. They suggest its structure is somewhat similar to members of the oviraptorosaurs and therizinosauroids (whose most famous member is the huge pot-bellied *Therizinosaurus*). Notably, oviraptors are known for their feathers, bird-like skulls and omnivorous diet.

The researchers suggest that *M. laiyang* is also reminiscent of

Fukuivenator paradoxus, which has been found in what is now Japan. They conclude that M. laiyang likely evolved separately from lineages that led to [modern birds](#). They plan to continue looking for more examples to more accurately classify the new [species](#).

More information: Xuri Wang et al, A new theropod dinosaur from the Lower Cretaceous Longjiang Formation of Inner Mongolia (China), *Cretaceous Research* (2023). [DOI: 10.1016/j.cretres.2023.105605](https://doi.org/10.1016/j.cretres.2023.105605)

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