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First endocranial description of a South American hadrosaurid: The neuroanatomy of *Secernosaurus koerneri* from the Late Cretaceous of Argentina

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The endocranial morphology of *Secernosaurus koerneri* (= *Kritosaurus australis* junior synonym), a hadrosaurid from the Upper Cretaceous of Argentina, was studied using latex and digital endocasts based on three fragmentary braincases. This new information allowed describing and comparing the neuroanatomy of this South American representative of the clade for the first time. The endocast morphology is mostly complete (except for the pituitary and the inner ear regions), and most cranial nerves and some blood vessels were reconstructed. Also, some features of the inner ear were observed in the CT scans, nonetheless its incompleteness restricts further comparisons. *Secernosaurus koerneri* shares its overall endocranial morphology with saurolophinid hadrosaurids, indicating a conservative brain morphology for Cretaceous hadrosaurids worldwide. The novel cranial information increases the knowledge of the neuroanatomy in hadrosaurids by adding a southern perspective, since knowledge on the endocranial anatomy of the lineage is biased by species from North America.

Key words: Dinosauria, Hadrosauridae, *Secernosaurus koerneri*, endocast, neuroanatomy, Cretaceous, South America, Argentina.

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