

Pecha Kucha Presentation Session 1, Thursday 11:30-12:45

Plio-Pleistocene deciduous hominid teeth from the Omo Valley (Ethiopia)

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The sediments from the Shungura Formation, in Omo (Ethiopia) date back to the Plio-Pleistocene, spanning a time period of approximately 3.5 to 1 Ma, providing an important window to the origin and evolution of early *Homo* and the eastern African robust lineage [1]. Teeth are the most common of the hominid fossils recovered from the Shungura Formation. Even though the dentition is typically the most taxonomically informative skeletal element, the dental remains from the Omo tend to be isolated teeth. In 1996, Suwa and colleagues [2] described 48 isolated permanent postcanine teeth and compared them with other hominins, concluding that multiple hominin taxa were preserved in the Omo dental remains.

Compared to the adult dentitions of hominins, there is a paucity of deciduous teeth available in the fossil record [3-5]. Consequently, little is known about the evolution of the juvenile stage of dental development compared to the permanent one. In this study, we focus attention on the isolated hominin deciduous dental remains from the Shungura Formation and compare these results to the conclusions of Suwa et al. [2] and our more recent analysis of the permanent dental specimens. Regarding dental terminology, there is debate as to how to refer to the two most posterior deciduous teeth. As the permanent molars have no predecessors in the deciduous dentition, some authors call them deciduous premolars, while others refer to them as deciduous molars because of their shape. Here, we use the latter terminology.

In this study, we describe the external morphology of the upper and lower deciduous molars (n=16) recovered from the Omo and compare them with other specimens found in the fossil record in an attempt to make taxonomic classifications and infer potential evolutionary relationships. Although we only have a few isolated deciduous teeth from the Shungura Formation, our preliminary results show that they exhibit some similarities with other early hominins, particularly with *Australopithecus* species.

This research was supported with funding from the European Research Council within the European Union's Horizon Europe (ERC-2021-ADG, Tied2Teeth, project number 101054659), a grant from the Spanish Ministerio de Ciencia e Innovación (Project PID2021-122355NB-C33 financed by MCIN/ AEI/10.13039/501100011033/ FEDER, UE), and support from the France-Berkeley Fund (2018 to JRB and LJH). Access to collection and OGRE fieldwork permit were granted by the Ethiopian Heritage Authority. This research benefited from the work of hundreds of people who participated in fieldwork missions, collection management, and preparation within the International Omo Research Expedition and the Omo Group Research Expedition. OGRE fieldwork was principally funded by the Ministry of Europe and Foreign Affairs, the National Research Agency, the Région Nouvelle-Aquitaine, CNRS INEE, PALEVOPRIM, and the Fyssen Foundation.

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