## Title:

Paleogenomic insights into Classic Copan

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## Abstract:

Copán, located at the southeastern edge of the Classic Maya world, was a key urban centre that connected regions of Central and South America. In 426/427 CE, a royal dynasty was founded there, lasting nearly four centuries. While the city is well-documented through archaeological and historical sources, little is known about the genetic makeup of its ancient inhabitants. In this study, we present genomic data from Classic Copán, including a possible royal family member and a person buried in a sacrificial context. Our findings reveal that the people of Classic Copán form a distinct genetic cluster closely related to the Late Archaic population from Belize, as well as Terminal Classic Maya from Chichén Itzá, Colonial-era Maya from Campeche, and modern Maya groups in Mexico. Tracing ancestry to the Late Archaic Belize population, we also detect genetic contributions from highland Mexico beginning in the Early-to-Middle Classic period, highlighting the importance of gene flow in shaping the Classic Maya civilization.