## ANCIENT DNA OF THE PHOENICIAN AND PUNIC POPULATION OF MOTYA

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The study of ancient DNA is a fundamental tool in the hands of archaeologists who use it to expand their knowledge of the ancient Mediterranean population, especially where historical and literary sources are limited and indirect. The Island of Motya, with its harvest of extraordinary finds, is a guide-site for this kind of studies and analyses. A total of 12 human tooth and cranial samples were collected from two different sites of the island, the Sacred Area of Kothon and the Necropolis. Of these, five successfully sequenced mitogenomes possessed haplotypes that could be associated with indigenous European ancestry maybe linked to the incorporation of indigenous Sicilians into the Phoenician society.

Keywords: Motya; Sicily; human remains; aDNA; Iron Age

## 1. Introduction

The island of Motya is located at the western tip of Sicily (fig. 1). It was a prominent prehistoric site that hosted, from the third millennium BC a flourishing settlement already fully integrated in the Mediterranean trade network. From the late 9<sup>th</sup>-beginning of 8<sup>th</sup> century BC, Motya was settled by Phoenician sailors during the early 8<sup>th</sup> century BC, and it remained a strategic Phoenician settlement in the western Mediterranean until its sacking by Dionysius in the Siege of Motya in 397/6 BC.<sup>4</sup> The discovery and context of archaeological artifacts spanning the life of the Phoenician colony provide useful information about the populations that settled the island from the first millennium BC and their cultural affiliations.<sup>5</sup> Ancient DNA analyses of skeletal remains recovered from these archaeological contexts may provide evidence of the genetic affinities of the inhabitants of Motya and identify any changes through time.

Archaeological evidence suggests that the island had a small permanent population until the middle of the 7<sup>th</sup> century BC when the population began to grow rapidly.<sup>6</sup> During the 6<sup>th</sup> century BC, Motya developed into a dense urban centre, complete with monumental architecture and a population that peaked at around 15,000 inhabitants.<sup>7</sup> The archaeological evidence suggests that a destructive event occurred on Motya around 550 BC<sup>8</sup> coinciding with, and possibly related to, the Carthage's attempt to conquer the island.<sup>9</sup> The destruction

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<sup>&</sup>lt;sup>4</sup> For a summary: Nigro 2013.

<sup>&</sup>lt;sup>5</sup> Harris ed. 2013; Nigro 2022a, 201-220.

<sup>&</sup>lt;sup>6</sup> Nigro - Spagnoli 2017, 105, fig. 2.

<sup>&</sup>lt;sup>7</sup> Aubet 2001.

<sup>8</sup> Nigro 2013.

Nigro 2015a, 83-108; 2019, 101-125.