



1.

Q-Boar

Quaternary suids. **B**iochronology of the **O**ut of **AfR**ica

The reconstruction of the tempo (chronology) and mode (paleoenvironmental context) of the first hominin diffusions *Out of Africa* to Europe is an ambitious and interdisciplinary goal.

The specific objective of the project is a suid biochronological scheme for Quaternary Europe, that means a distribution chart of species and subspecies of fossil boars.

The development of biochronological schemes, valid before, during, and after the *Out of Africa*, is of primary importance for reconstructing the tempo and mode of human diffusions. Biochronology is, in fact, both the main relative dating methodology in the continental realm, and a tool for correlating paleoclimatic, paleogeographic and paleoecological events, because these phenomena determine the evolution of species.

Suids are well-renowned biochronological marker, widely used in African Neogene-Quaternary. In Quaternary Europe, the replacement of the humid-adapted *Sus strozzi* with the generalist *S. scrofa* is a bioevent of high palaeoecological significance, which happens in the same time-span of the first diffusions of our own extinct relatives.

European suids are both very promising from a biochronological perspective and poorly studied, mainly due to erroneous, but well-established interpretations, proposed in historical times.

I will re-examine, or study for the first time, a great amount of unfairly ignored suid fossil remains, with modern and innovative methodologies: 1) morphology and morphometry, 2) allometry, 3) multivariate statistic.

This threefold analysis will clarify how many evolutionary units (species and subspecies) are present in each considered time-span, their chronological distribution, and their paleoenvironmental significance.

The resulting biochronological scheme will substantially contribute to enhance our knowledge of the *Out of Africa* scenario.

N.B. I dottorandi del primo anno al punto 1 possono inserire il riassunto del progetto di ricerca (max 1.000 parole)