THE EVOLUTIONARY HISTORY OF ITALY FROM THE MESOLITHIC TO THE MIDDLE AGES: LESSONS FROM ANCIENT GENOMES

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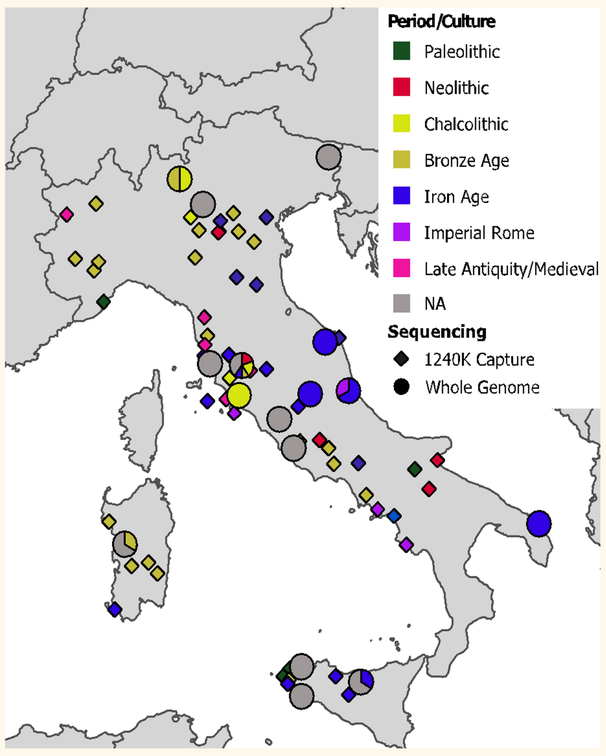
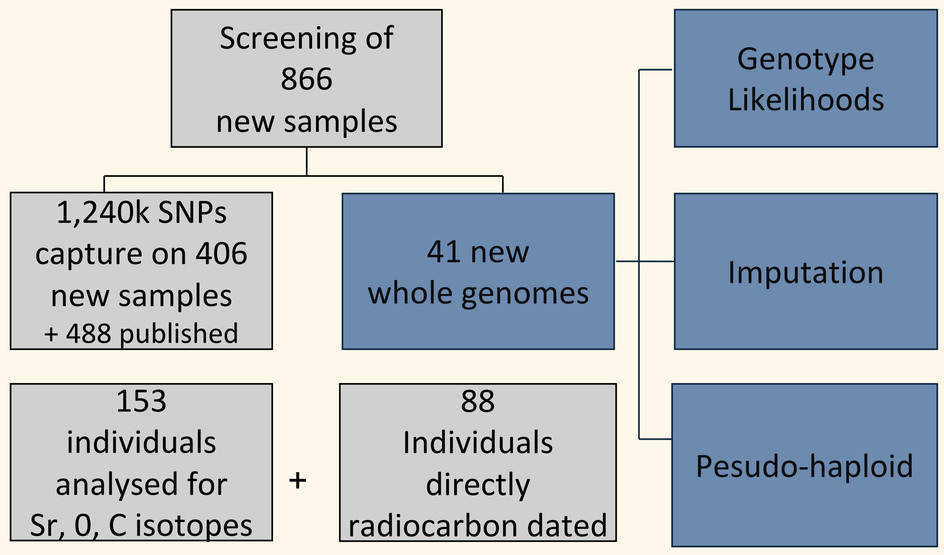


Background

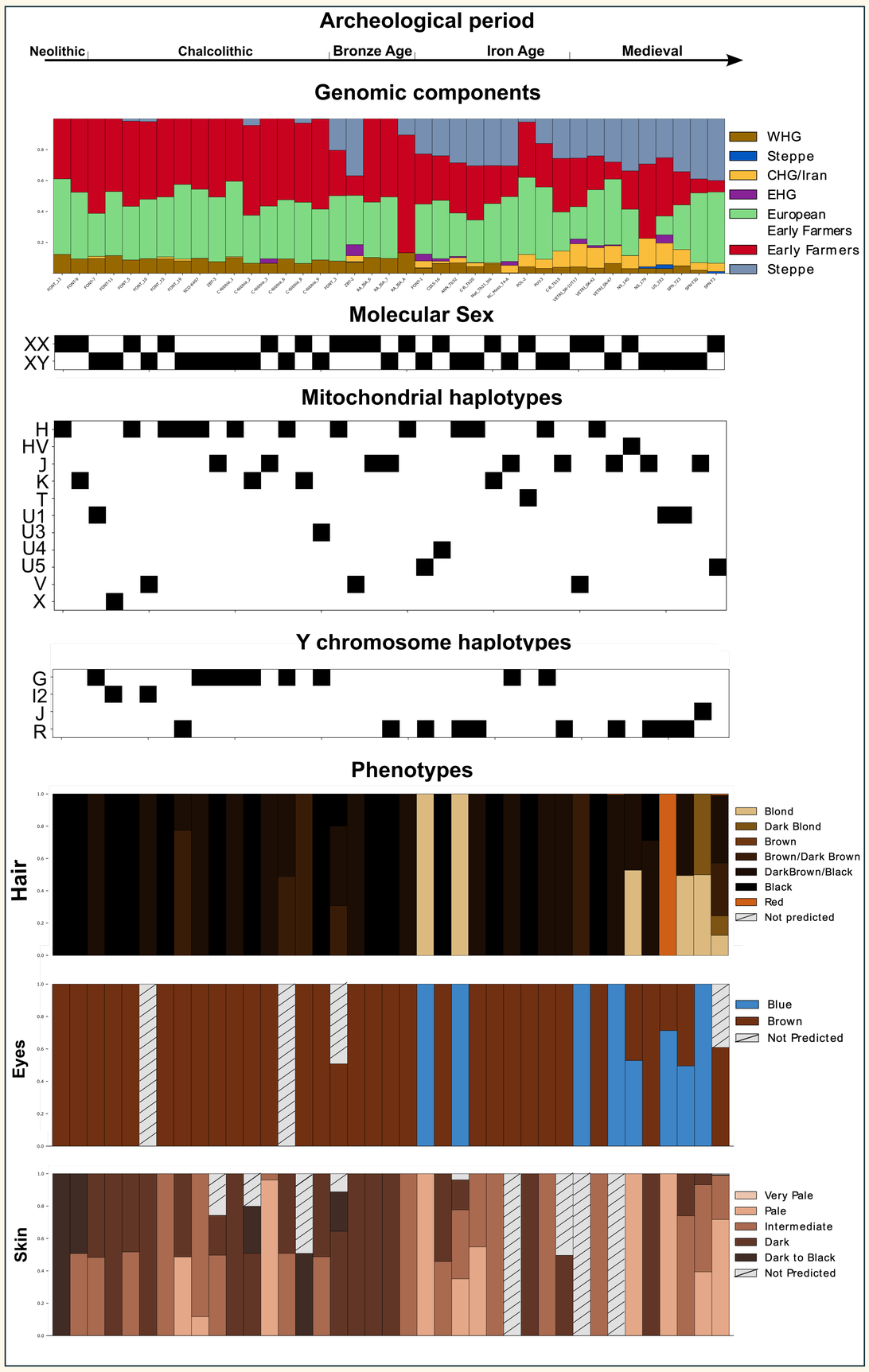
- Italy occupies a strategic geographical position in the center of Mediterranean Sea.
- The genetic variation in Italy is the highest in Europe.
- Different levels of genetic exchanges between local groups occurred both in prehistoric and historical times.
- There has been little inference about past population dynamics involving our Peninsula and nearby islands.

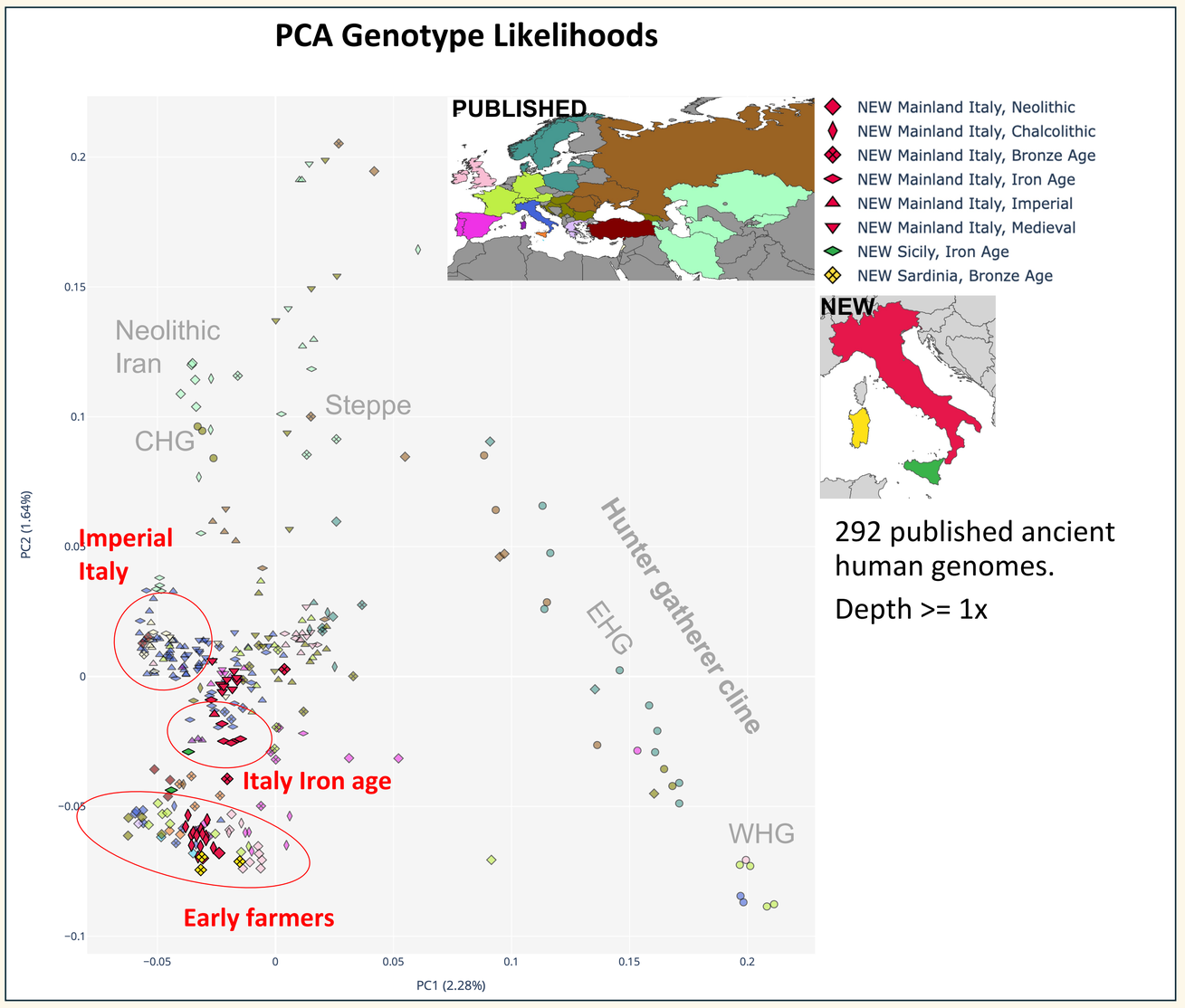
Workflow



Objectives

1. Investigate how the main migrations affect the genetic composition of Italy and how it relates to the whole European context.
2. To identify ancient genetic components that have influenced the Italian genetic variation.
3. To infer the demographic scenario that best describes the events occurred in Italy through time, together with estimation of their time and extent.

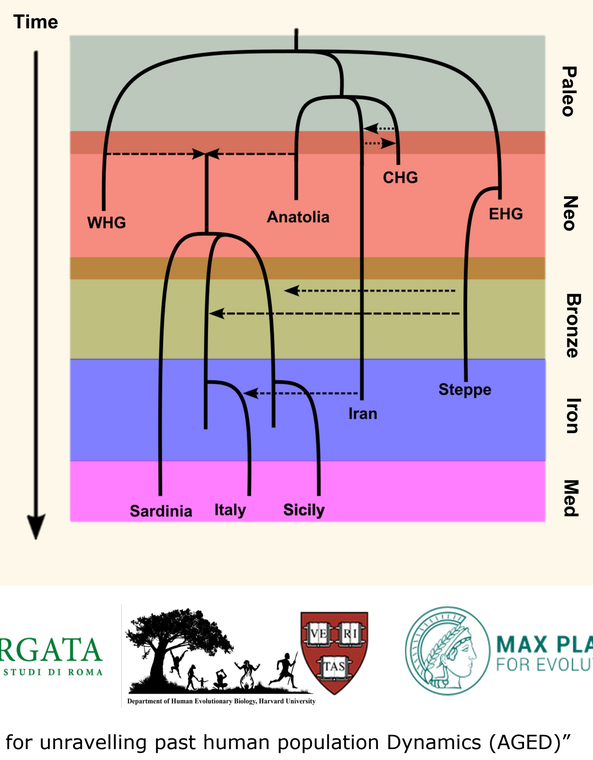




292 published ancient human genomes.

Depth >= 1x

Future perspectives



- We can reconstruct past evolutionary dynamics employing simulations and demographic models.
- Build demographic models employing genetic and archeological evidence.
- Infer the demographic scenario that best describes the migrations occurred in the Italian peninsula and estimate their impact.

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